EASTLAKE TRAILS/GREENS REPLANNING PROGRAM

Final Subsequent Environmental Impact Report EIR #97-04

November 1998

RECON

REGIONAL ENVIRONMENTAL CONSULTANTS

PREFACE TO THE FINAL SEIR

This Final Supplemental Environmental Impact Report for the proposed EastLake Trails/Greens Replanning complies with all criteria, standards, and procedures of the City of Chula Vista and the California Environmental Quality Act (CEQA). It includes the following:

Addendum to the SEIR – An Addendum to the SEIR has been prepared to reflect minor modifications to the site plan made by the project applicant subsequent to the close of the public review period.

Errata – The Errata indicates where the changes have been made to the text of the final SEIR based on the letters of comment received during the public review period or input from City staff. The changes to the text of the final SEIR, with the exception of the Executive Summary (Table 1-2), are indicated by strikeout (deleted) and underline (inserted) markings.

Public Review Letters and Responses – The letters of comment received during the SEIR public review period and the numbered responses precede the text of the final SEIR.

Mitigation, Monitoring, and Reporting Program – As required by Section 21081.6 of the Public Resources Code, a listing of the mitigation requirements and the responsible party for implementing the requirements are included.

ADDENDUM TO SUBSEQUENT ENVIRONMENTAL IMPACT REPORT
EIR-95-01

PROJECT NAME:	EastLake Trails/Greens Replanning Program
PROJECT LOCATION:	South of Otay Lakes Road and East of Hunte Parkway
PROJECT APPLICANT:	The EastLake Company
DATE:	November 4, 1998

I. INTRODUCTION

(a) When an EIR has been certified or a Negative Declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

1. Substantial changes are proposed in the project which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted.

(b) If changes to a project or its circumstances occur or new information becomes available after adoption of a Negative Declaration, the lead agency shall prepare a subsequent EIR if required under subsection (a). Otherwise, the lead agency shall determine whether to prepare a subsequent Negative Declaration, an addendum, or no further documentation.

This addendum has been prepared in order to provide additional information and analysis concerning impacts as a result of the applicant's decision to slightly modify the project description. As a result of this analysis, the basic conclusions of the Environmental Impact Report have not changed.

Therefore, in accordance with Section 15164 of the CEQA Guidelines, the City has prepared the following addendum to the Environmental Impact Report for the EastLake Trails/Greens Replanning Program EIR.

II. PROJECT SETTING

The area subject to the EastLake Trails/Greens Replanning Program is within the EastLake planned community, a large, partly developed mixed-use community on the urbanizing eastern fringe of the city of Chula Vista. It is about 7.5 miles from the Civic Center of Chula Vista and about an equal distance north of the Mexican border. The Upper and Lower Otay Lakes are just east of the EastLake community. West of EastLake is other developed areas of eastern Chula Vista. To the north, the land stretches toward the Sweetwater River valley and Sweetwater Reservoir, with the prominent peaks of San Miguel and Mother Miguel Mountains to the north. The Rolling Hills Ranch project, approved as Salt Creek Ranch, is located immediately adjacent to the northern boundary of EastLake. Development plans for the entire 1,197-acre Rolling Hills Ranch project have been approved by the City of Chula Vista and construction of the first phase began in 1997. The 2,590-acre Rancho San Miguel project is located north of Rolling Hills Ranch and has an approved GDP and is currently processing a SPA Plan. To the south and to the southwest of Otay Lakes Road, EastLake is bordered by part of the 22,900-acre Otay Ranch property, stretching south to the Otay River valley. A General Development Plan was approved by Chula Vista and the County of San Diego for Otay Ranch in 1993. Development of the Otay Ranch has begun in Village 1, south of Telegraph Canyon Road and west of the intersection of Otay Lakes Road with Telegraph Canyon Road.

Terrain in the project area consists of gently rolling hills. In general, the land not developed for urbanized uses has been much disturbed by agriculture, but some small areas of native vegetation persist, especially along the Salt Creek corridor on the eastern boundary of the Trails property. Topographically, EastLake Greens consists mainly of an irregular, north/south-trending ridge with its highest elevations ranging from 700 to 750 feet above mean sea level (MSL). To the west, the elevation falls toward the Poggi Canyon drainage, with the lowest point at an elevation of about 550 feet above MSL in the upper end of Poggi Canyon. Poggi Canyon drains southwest to the Otay River.

III. PROJECT DESCRIPTION

Subsequent to the issuance of the draft SEIR for public review, The EastLake Company submitted a revised Site Utilization Plan (see attached Figure 1) for the EastLake Trails project. The revised site plan would adjust the boundaries of the medium density residential land use designations along Clubhouse Drive and refine the open space/private recreation designations within Salt Creek. Changes in the area to be disturbed by grading are not proposed. The refinements in the land use categories would result in an increase in the total number of residential dwelling units from 1,120 to 1,143 (a 23-unit or 2 percent increase).

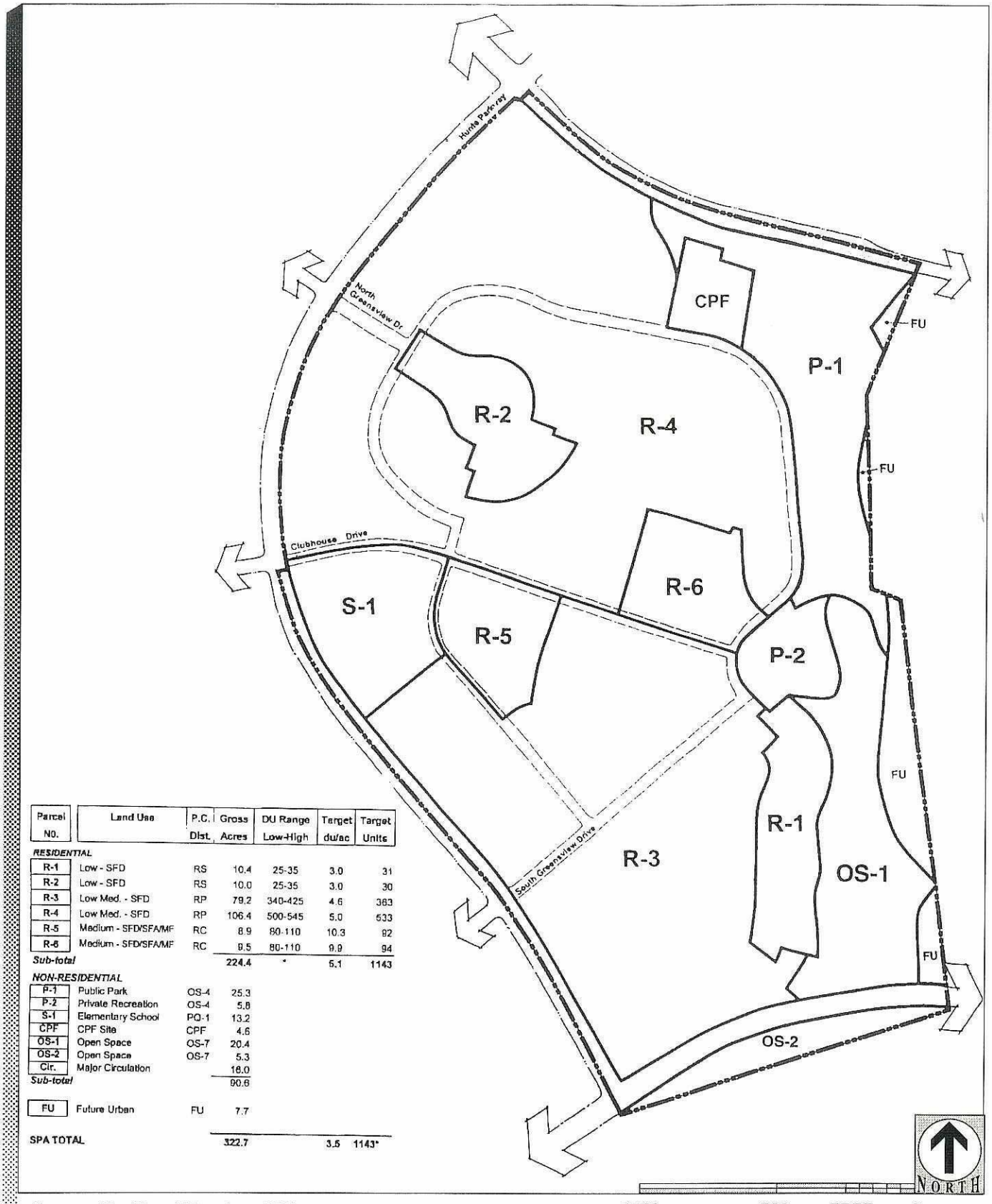
IV. ANALYSIS

The proposed modifications to the EastLake Trails site design represent only minor technical changes to the proposed SPA plan. The proposed modifications to the internal site design and incremental increase in dwelling units would not change the analysis and conclusions presented in the SEIR. As such, the changes are not of such magnitude to warrant the preparation of another subsequent environmental document.

V. CONCLUSION

Pursuant to Section 15164 of the State CEQA Guidelines and based upon the above discussion, I hereby find that the project revisions to the proposed project will result in only minor technical changes or additions which are necessary to make the Environmental Impact Report adequate under CEQA.

Environmental Review Coordinator



Parcel No.	Land Use	P.C. Dist.	Gross Acres	DU Range Low-High	Target du/ac	Target Units
RESIDENTIAL						
R-1	Low - SFD	RS	10.4	25-35	3.0	31
R-2	Low - SFD	RS	10.0	25-35	3.0	30
R-3	Low Med. - SFD	RP	79.2	340-425	4.6	363
R-4	Low Med. - SFD	RP	106.4	500-545	5.0	533
R-5	Medium - SFD/SFA/MF	RC	8.9	80-110	10.3	92
R-6	Medium - SFD/SFA/MF	RC	9.5	80-110	9.9	94
Sub-total			224.4	*	5.1	1143
NON-RESIDENTIAL						
P-1	Public Park	OS-4	25.3			
P-2	Private Recreation	OS-4	5.8			
S-1	Elementary School	PQ-1	13.2			
CPF	CPF Site	CPF	4.6			
OS-1	Open Space	OS-7	20.4			
OS-2	Open Space	OS-7	5.3			
Clr.	Major Circulation		18.0			
Sub-total			90.6			
FU	Future Urban	FU	7.7			
SPA TOTAL			322.7		3.5	1143*

Source: Cinti Land Planning 1998

1500 750 FEET 0

FIGURE 1

Revised Site Utilization Plan for EastLake Trails

RECON

ERRATA

FINAL EASTLAKE TRAILS/GREENS REPLANNING PROGRAM SUBSEQUENT EIR

As a result of several comment letters received during the draft SEIR public review period, changes have been made to the final SEIR text, including some mitigation measures. Marginal notes in the text of the final SEIR reference the letter and the numbered response that resulted in the change. The text changes are noted in Chapter 4.1, Land Use; Chapter 4.2, Traffic Circulation; Chapter 4.3, Biology; and Chapter 4.9, Public Facilities, of the final SEIR. These changes to the text are indicated by strikeout (deleted) and underline (inserted) markings.

Changes have also been made to the text to provide updated information in the final SEIR based on review of the draft SEIR by City staff. The more substantive changes to the public facilities and traffic sections of the final SEIR are described below with the other changes listed in the following errata. These changes are also shown by strikeout (deleted) and underline (inserted) markings.

Public Facilities

Following preparation of the draft SEIR, Public Facilities Financing Plans were prepared for both the EastLake Trails and EastLake Greens SPAs. These proposed financing plans contain detailed information regarding the implementation and timing of several public improvements described as mitigation measures in the SEIR. Relevant information from the PFFPs has been included in the final SEIR to describe the implementation of the mitigation measures in greater detail. See final SEIR, Chapter 4.9, Public Facilities, for the revisions to mitigation measures (Measures 4.9.4.1, 4.9.4.4, 4.9.4.5, 4.9.4.7, 4.8.4.8, and 4.9.4.9).

Traffic Circulation

Based on public review comments on the draft SEIR from the City of Chula Vista Public Works Department, information contained in the PFFPs, and refined intersection analyses (e.g., EastLake Parkway at Clubhouse Drive), the traffic mitigation measures have been revised as part of the final SEIR. See final SEIR, Chapter 4.2.4, Traffic Circulation, for the revisions to the traffic mitigation measures (Measures 4.2.4.1 through 4.2.4.11).

Other Final SEIR Changes

Other minor changes to the final SEIR are listed below by SEIR section:

Traffic Circulation: Section 4.2.1, Existing Conditions; Section 4.2.3, Level of Significance Prior to Mitigation; and Section 4.2.5, Level of Significance After Mitigation.

Hydrology/Drainage: Section 4.4.4, Mitigation Measures.

Noise: Section 4.6.4, Mitigation Measures.

Paleontology Section 4.7.4, Mitigation Measures.

Public Facilities: Section 4.9.1, Existing Conditions; Section 4.9.2, Impacts; and Section 4.9.3, Level of Significance Prior to Mitigation.

EASTLAKE TRAILS/GREENS REPLANNING PROGRAM
SUBSEQUENT EIR #97-04
LETTERS OF COMMENT AND RESPONSES

Letters of comment to the draft SEIR were received from the following agencies, groups, and individuals. The letters of comment and responses follow.

STATE OF CALIFORNIA-THE RESOURCES AGENCY PETE WILSON, *Governor*

DEPARTMENT OF FISH AND GAME
Natural Community Conservation Planning
4949 Viewridge Avenue
San Diego, CA 92123
(619) 467-4251
FAX 467-4235

August 17, 1998

Ms. Marilyn Ponseggi
City of Chula Vista
Planning Department
276 Fourth Street
Chula Vista, CA 91910

Comments on the EastLake Trails Replanning Program Draft Supplemental EIR (SCH 92031049)

Dear Ms. Ponseggi:

The California Department of Fish and Game (Department) has reviewed the above referenced document pursuant to our role as a Trustee Agency under Section 15386 of the California Environmental Quality Act (CEQA). This project generally proposes to prepare the Sectional Planning Area (SPA) documents for a 322 acre parcel and the inclusion of two "land swap parcels" totaling about 126 acres, into the EastLake II GDP, EastLake Greens SPA, and associated documents. We have identified several issues that require clarification and possibly project changes to ensure that the proposed habitat mitigation plan can be achieved. Upon resolution of these issues, the Department would concur that the project and its proposed mitigation adequately address environmental impacts that will result from implementing the project. Please provide the Department with clarifying responses to the following issues prior to certifying the project.

1 **The City of Chula Vista needs to confirm that processing this project will not preclude the preparation of its MSCP Subarea Plan.** This site includes Salt Creek drainage that adjoins committed preserve habitat lands within Salt Creek on the Otay Ranch GDP.

2 The Supplemental EIR contains references to the land swap parcels as either 141.7 acres (page 24) or 125.6 acres (page 39). Please clarify which number is correct.

Responses to Public Comments

1. As described in the draft SEIR (pages 92-93), the City of Chula Vista's draft Subarea Plan does not include any portion of the EastLake Trails or "Land Swap" parcels within any Multi-Habitat Planning Area boundary. The Otay Ranch property south of Olympic Parkway and lands to the east around Lower Otay Reservoir are the nearest habitat preserve areas within the vicinity of EastLake. The proposed project would not preclude the preparation of Chula Vista's Subarea Plan and would not affect the Salt Creek drainage off-site within Otay Ranch. In addition, the project incorporates hydrology and water quality measures that would avoid adverse impacts within the committed preserve habitat lands off-site within Salt Creek on the Otay Ranch GDP.

2. The final SEIR has been revised to clarify these referenced acreages for the "Land Swap" parcels. The correct acreage for the "Land Swap" parcels is 141.7 acres.

Pages 28-33, including Figures 3-4 and 3-5, and Table 3-2, provide a listing of the use allocations for the EastLake Trails property. That information, particularly Table 3-2, suggests that only 5 acres of open space is available for natural habitat restoration purposes. However, the document identifies impacts to 6 acres of
3 wetlands, and requires roughly a 2:1 ratio (11.32-12.92 acres) of mitigation for wetlands (Table 4.3-3). Included in the mitigation component is 1.78 acres of open water habitat. Open water habitat is not an appropriate substitute for wetland vegetation, and should not be included as such in the table as a mitigation component for wetland vegetation impacts.

In addition, a previous project that allowed construction of Olympic Parkway across Salt Creek will impact 1.96 acres of Salt Creek wetlands and requires mitigation
4 within the EastLake Trails property. That project is required to create and restore 4.7 acres of wetlands. It is unclear from the allocated land uses (e.g., Table 3-2) how the project adequately allocates sufficient area for all of the wetland vegetation mitigation (4.7 acres plus 11.32 acres = 15.92 acres) to occur onsite. Also, the location of these habitat restoration areas should be distinct from public use areas (active parklands) to maintain and assure their function as viable habitat. Figure 4.3-2
5 illustrates a conceptual mitigation plan that depicts natural habitat (mitigation) intermixed with recreational use areas. The Department does not concur that the conceptual mitigation plan illustration is acceptable and requests to be involved in the preparation of the final mitigation plan.

The document provides a general description of the habitats that will be created and restored to mitigate for the impacts to willow wetland and stream course (Figure 4.3-2 and Table 4.3-3). Mitigation is proposed to create/restore at a ratio of
6 approximately 1:1 for willow wetland and substitute at approximately a 1:1 ratio with sycamore/cottonwood and oak woodland habitats. A wetland mitigation plan of a least 2:1 is generally required by the Department, which requests that it be included in preparation of the final wetland mitigation planning that is required as Mitigation Condition 4.3.4-1 in the SEIR.

The Department concurs that it must be consulted by the applicant prior to issuance of the grading permit so that a Streambed Alteration Agreement can be
7 applied for and obtained from the Department before any construction occurs within the Salt Creek drainage (Mitigation Condition 4.3.4-2).

Mitigation for those wetland impacts should be set aside as natural open space, and not be included into public amenity/use open space such as for recreational park
8 purposes. Please clarify how the natural open space mitigation areas will be assured by the projects.

3. The open space designation is a zoning description for the City of Chula Vista. It is not intended to represent available or suitable land as mitigation. For clarification, the necessary acreage to accomplish the proposed mitigation includes both the 5 acres shown as OS (Open Space) and a portion of the 15.8 acres shown as P-2 (Public Park/Open Space) in Table 3-2.

   In addition, Table 4.3-3 has been revised in the final SEIR to clarify the impacts to wetland habitats. Specifically, 2.92 acres of the total 6.0 acres of wetland habitats is directly associated with project development features (i.e., access road crossing and other recreational facilities). The remaining 2.78 acres of wetland impacts result strictly from the proposed enhancement of the existing degraded wetland habitat that consists predominantly of non-native species. In order to enhance the existing degraded wetland habitats, contoured grading within Salt Creek drainage is proposed, which will allow riparian habitats to be established and survive in the long term.

   As shown in the concept mitigation plan (Figure 4.3-2), 5.8 acres of willow woodland bordered by areas of cottonwood woodland, sycamore woodland, and oak woodland would replace the existing degraded habitat within Salt Creek. It is recognized that mitigation ratios of 2:1 are often used for wetland impacts. However, given the existing quality of the degraded wetland habitat on-site, the proposed 5.8 acres of created willow riparian woodland and wetland would mitigate for the proposed impacts and result in no net loss in function and value. Finally, as requested by the California Department of Fish and Game, Table 4.3-3 has been revised to delete the 1.78 acres of open water habitat as part of the mitigation for wetland impacts.

4. The previously approved mitigation area pursuant to the 1997 404 permit for Olympic Parkway would not be disturbed or affected by the proposed project and would be maintained in accordance with the provisions of the conservation easement. The approved 404 permit contains easement provisions which ensure that this area would not be impacted by the proposed project.

5. The draft Salt Creek conceptual mitigation plan for the proposed project contains provisions regarding fencing, grade separation, trail locations, and planting schemes which would ensure that there is buffering between active parkland/ public use areas and restored habitats. Fencing will make these areas inaccessible to the public. It is recognized that the final mitigation plan will be developed in conjunction with the California Department of Fish and Game.

6. See response 3 above.

7. Comment noted.

8. A conservation easement would be placed over all of the riparian woodlands. Access by the public into this area would be restricted to the proposed trail and picnic areas along the perimeter of the mitigation site.

Please contact the Department at the above address and phone number to discuss our comments.

Sincerely,

David M. Fairhead

for William E. Tippets
Habitat Conservation Supervisor

cc: Department of Fish and Game
Ron Rempel
Gail Presley
Sacramento

Terri Dickerson
Laguna Niguel

U.S. Fish and Wildlife Service
Sherry Barrett
Nancy Gilbert
Carlsbad

eastlake.bt

STATE OF CALIFORNIA - BUSINESS, TRANSPORTATION AND HOUSING AGENCY PETE WILSON, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 11, P.O. BOX 85406, MAIL STATION 5-5, SAN DIEGO, 92186-5406
(619) 688-6424 TDD Number
(619) 688-6954

RECEIVED
AUG 31 1998
PLANNING

August 26, 1998

11-SD-805
P.M. 6.1
(K.P.9.8)

Mr. Douglas Reid
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Dear Mr. Reid:

Draft Supplemental EIR for the Eastlake Trails/Greens Replanning Program
SCH 98071094

Caltrans District 11 comments are as follows:

1 • Page 7; Add "The City of Chula Vista is the lead agency for Deficiency Planning on Interstate Route 805 (I-805)."

2 • Page 8; Same as above in 2 paragraphs.

3 • Page 50; Caltrans uses the Intersecting Lane Vehicle (ILV) analysis for signalized intersection capacity.

4 • Page 55; The 5% impact criteria is piecemealing of the Otay Ranch impacts to I-805. Also, an East Palomar Street half-diamond interchange does not meet
4A Federal standards and is not likely to be approved by the Federal Highway Administration. Adding an interchange would be a direct impact to I-805.

5 • Page 56; Buildout should have a year and State Route 125 (SR-125) as a tollway.

6 • Pages 74 and 75; Buildout numbers should use the South Bay Buildout year with SR-125 as a tollway. Average Daily Traffic (ADT) numbers appear to be low.

7 • Pages 81, 82 and 83; Paragraphs 4.2.4.4,-.8,-.9,-.15,-.16; Add "The City of Chula Vista is responsible for the Deficiency Plan."

8 • State highway ramp volumes should be shown for the peak periods in the text, figures and tables.

9 • Caltrans is not responsible for any noise impacts to this property. If there are any noise impacts, the owner has the responsibility to provide the mitigation.

10 • The drainage system for this project should be coordinated with the design of future SR-125.

Responses to Public Comments

1. Freeway deficiencies are a concern to the entire region and not just the City of Chula Vista. Caltrans and SANDAG are the regional agencies that are responsible for freeway planning, not the City of Chula Vista. The City of Chula Vista is willing to review and consider participating in a regional deficiency plan as developed and approved by SANDAG, Caltrans, and all other local jurisdictions.

2. See response 1 above.

3. The 1994 HCM methodology was utilized to analyze all intersections, including the I-805 and SR-125 interchanges. This methodology is considered to be superior to the ILV analysis because it is more detailed and takes into account such factors as cycle length, phasing type, truck percentages, and pedestrian activity.

4. The five percent threshold for identifying project ADT contributions to freeway segments as significant direct impacts does not represent piecemealing of impacts. The SANDAG traffic model dictates that all current forecast developments in the region be considered in the model. The EastLake project traffic report and projected traffic volumes was based on SANDAG modeling, which included cumulative projects, including Otay Ranch, in the vicinity of the site.

4A. The City, in conjunction with Caltrans, is currently studying the potential for a future Palomar Street/I-805 interchange. A determination regarding this interchange will be made upon completion of this study.

5. The SANDAG traffic modeling process does not prescribe a year to the buildout scenario of the region. As such, State Route 125 was assumed to be a toll road in the modeling for Year 2010, and it is not until the buildout scenario that SR-125 was modeled as a non-toll road (i.e., freeway).

6. See response 5 above. The forecast ADT volumes for the project scenarios are considered appropriate and were based on SANDAG Series 8 growth forecasts in conjunction with the adopted General Plan of the City of Chula Vista and were reviewed for accuracy by the City of Chula Vista and SANDAG staff.

7. See response 1 above.

8. I-805 and SR-125 ramp volumes during the AM and PM peak periods for all scenarios are contained in Appendix B of the traffic study.

9. Noise mitigation improvements for the "Land Swap" parcels were identified in the draft SEIR on page 136. The modeling for the "Land Swap" parcels took into account the future freeway. The identification of appropriate noise attenuation measures (e.g., walls) to the satisfaction of the Director of Planning and Building shall be a condition of future tentative map approval.

10. Comment noted.

- 11 • Any work performed within Caltrans' right of way will require an encroachment permit. Additionally, as of July 1, 1998, Caltrans no longer maintains both the metric and imperial unit versions of the Standard Plans, Specifications, Special Provisions and manuals. Therefore, all encroachment permit applications submitted to Caltrans must be stated in metric units. Information regarding encroachment permits may be obtained by contacting our Permits Office at (619) 688-6158. Early coordination with our agency is strongly advised for all encroachment permits.

11. Comment noted.

- 12 • Caltrans supports the concept of "fair share" contributions on the part of developers toward present and future mitigation of traffic impacts on State highway facilities.

12. See response 1 above.

- 13 • Please send us a copy of the Notice of Determination when it becomes available.

13. The City of Chula Vista will send a copy of the determination to Caltrans.

Comments on Appendix B, Traffic Impact Analysis, are as follows:

- 14 • Pages 1, 26, and 76; Buildout should have a year and should be South Bay Buildout Model with SR-125 as a tollway.

14. See response 5 above.

- 15 • Page 27; The 5% impact criteria is piecemealing of the Otay Ranch impacts to I-805.

15. See response 4 above.

- 16 • Pages 33 and 51; Buildout should use the South Bay Buildout year with SR-125 as a tollway. ADT numbers appear to be low. A half-diamond interchange on I-805/East Palomar Street would be a direct impact to I-805.

16. See responses 4, 5, and 6 above.

- 17 • Pages 78, 79, 80 and 81; Add "The City of Chula Vista is responsible for the Deficiency Plan on I-805."

17. See response 1 above.

Our contact person for Traffic Operations is Richard Coward, Branch Chief, at (619) 688-6610. For I-805 our contact person is John Kempf, Project Engineer at (619) 688-6994. Our contact person for SR-125 is Laurie Berman, Route Manager, at (619) 688-3631.

Sincerely,

Bill Figge

BILL FIGGE, Chief
Planning Studies Branch

BF/LS:vc

State of California

GOVERNOR'S OFFICE OF PLANNING AND RESEARCH

1400 TENTH STREET
SACRAMENTO 95814

PETE WILSON
GOVERNOR

PAUL F MINER
DIRECTOR

August 25, 1998

MARILYN PONSEGGI
CITY OF CHULA VISTA
276 FOURTH AVENUE
CHULA VISTA, CA 91910

Subject: EASTLAKE TRAILS/GREENS REPLANNING PROGRAM SCH #: 98071094

Dear MARILYN PONSEGGI:

The State Clearinghouse submitted the above named environmental document to selected state agencies for review. The review period is closed and none of the state agencies have comments. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call at (916) 445-0613 if you have any questions regarding the environmental review process. When contacting the Clearinghouse in this matter, please use the eight-digit State Clearinghouse number so that we may respond promptly.

Sincerely,

ANTERO A. RIVASPLATA
Chief, State Clearinghouse

Mail to: State Clearinghouse, 1400 Tenth Street, Sacra... CA 95814 916/445-0613 | Previous SCH #: | SCH # 92031064

Project Title: EastLake Trails/Greens Rep... ing Program

Lead Agency: City of Chula Vista | Contact Person: Marilyn Ponsenga

Street Address: ... Fourth Avenue | Phone: (619) 585-5707

City: Chula Vista | Zip: 91910 | County: San Diego

Project Location

County: San Diego | City/Nearest Community: Chula Vista - Eastern Territories

Cross Streets: Otay Lakes Rd | Zip Code: 91913 | Total Acres: 1,317

Assessor's Parcel No.: Various | Section: -- | Twp.: 18 | Range: 1-W | Base: --

Within 2 Miles: State Hwy #: Future SR-125 | Waterways: --

Airports: -- | Railways: -- | Schools: EastLake High, Various elementary schools

Document Type

CEQA: ☐ NOP ☐ Early Cons ☐ Neg Dec ☐ Draft EIR ☒ Supplement/Subsequent ☐ EIR (Prior SCH No.) ☐ Other

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other

Local Action Type

☐ General Plan Update ☒ General Plan Amendment ☐ General Plan Element ☐ Community Plan

☒ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan

☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, Parcel Map, Tract Map, etc.)

☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☒ Other Modification of SPA

Development Type

☒ Residential: Units ____ Acres ____

☒ Office: ... Sq.ft. ____ Acres ____ Employees ____

☐ Commercial: Sq.ft. ____ Acres ____ Employees ____

☐ Industrial: Sq.ft. ____ Acres ____ Employees ____

☐ Educational ____

☐ Recreational ____

☐ Water Facilities: Type ____ MGD ____

☐ Transportation: Type ____

☐ Mining: Mineral ____

☐ Power: Type ____ Watts ____

☐ Waste Treatment: Type ____

☐ Hazardous Waste: Type ____

☐ Other: ____

Project Issues Discussed in Document

☐ Aesthetic/Visual
☐ Agricultural Land
☒ Air Quality
☒ Archeological/Historical
☐ Coastal Zone
☒ Drainage/Absorption
☐ Economic/Jobs
☐ Fiscal
☐ Flood Plain/Flooding
☐ Forest Land/Fire Hazard
☐ Geologic/Seismic
☐ Minerals
☒ Noise
☐ Population/Housing Balance
☒ Public Services/Facilities
☒ Recreation/Parks
☒ Schools/Universities
☐ Septic Systems
☒ Sewer Capacity
☐ Soil Erosion/Compaction/Grading
☐ Solid Waste
☐ Toxic/Hazardous
☒ Traffic/Circulation
☐ Vegetation
☐ Water Quality
☐ Water Supply/Groundwater
☒ Wetland/Riparian
☐ Wildlife
☐ Growth Inducing
☒ Landuse
☒ Cumulative Effects
☐ Other ____

Present Land Use/Zoning/General Plan Use Planned Community (PC)

Project Description

See Attached

State Clearinghouse Contact: Ms. DeLicia Wynn (916) 445-0613

State Review Began: 7-2-98

Dept. Review to Agency: 8-17

Agency Rev to SCH: 8-27

SCH COMPLIANCE: 8-24

Please note SCH Number on all Comments

98071094

Please forward late comments directly to the Lead Agency

AQMD/APCD 21 (Resources: 3-25)

Project Sent to the following State Agencies

X Resources
___ Boating
___ Coastal Comm
___ Coastal Consv
___ Colorado Rvr Bd
___ Conservation
X Fish & Game # 5
___ Delta Protection
___ Forestry
X Historic Preservation
X ~~Parks & Rec~~
___ Reclamation
___ Bay Cons & Dev Comm
___ DWR
___ OES

Bus Transp Hous
___ Aeronautics
___ CHP
X Caltrans # 11
___ Trans Planning
___ Housing & Devel
___ Food & Agriculture
___ Health & Welfare

State/Consumer Svcs
___ General Services

Cal EPA
X ARB
X CA Waste Mgmt Bd
___ SWRCB: Grants
___ SWRCB: Delta
___ SWRCB: Wtr Quality
___ SWRCB: Wtr Rights
X Reg. WQCB # 9
___ Toxic Sub Ctrl-CTC

Yth/Adlt Corrections
___ Corrections

Independent Comm
___ Energy Commission
X NAHC
___ Public Utilities Comm
___ Santa Monica Mtns
X State Lands Comm
___ Tahoe Rgl Plan

___ Other: ____
___ Other: ____

Responses to Public Comments

OTAY WATER DISTRICT
Dedicated to Community Service
2554 SWEETWATER SPRINGS BOULEVARD SPRING VALLEY CALIFORNIA 91977-7296
TELEPHONE 670-2222 AREA CODE 619

August 3, 1998

W.O. 8644

Ms. Marilyn Ponseggi
Planning Department
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Subject: Eastlake Trails/Greens Replanning Program
Draft Subsequent Environmental Impact Report (EIR # 97-04)

Dear Ms. Ponseggi:

The Otay Water District (OWD) appreciates the opportunity to review and comment on the subject Draft Subsequent Environmental Impact Report (SEIR). OWD requests the following comments be addressed and incorporated into the Final SEIR.

1 • The Recycled Water section should state that those portions of the project site that have not already been annexed are required to be annexed into Improvement Districts 22 and 27 in order to obtain recycled water service.

2 • The Subarea Water Master Plan (SAMP) for the project is nearing final approval. Please ensure that the facilities described in the SEIR match those described in the final SAMP.

Please call Terry Kreuiter, OWD, Engineering Public Service Counter, telephone (619) 670-2246, if you need any information with regard to water facilities or service; or myself at (619) 670-2293 with regard to environmental issues.

Sincereiy,

Michael F. Coleman, AICP
Environmental Specialist

MC:AB:seh

cc: Tim Stanton
Bart Mumford
Jim Peasley
Terry Kreuiter
David Charles
Jan Tubiolo
Barbara Reid, City of Chula Vista

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Responses to Public Comments

1. The final SEIR has been revised to reflect this comment regarding the Improvement District associated with recycled water service.

2. The approved version of the Subarea Water Master Plan (SAMP) will be attached as an appendix to the final SEIR, and the final SEIR has been revised as necessary.

CHULA VISTA ELEMENTARY SCHOOL DISTRICT

84 EAST "J" STREET • CHULA VISTA, CALIFORNIA 91910 • 619 425-9600

EACH CHILD IS AN INDIVIDUAL OF GREAT WORTH

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SUPERINTENDENT

LIBIA S. GIL, Ph.D.

August 20, 1998

Ms. Marilyn Ponseggi
Environmental Review Coordinator
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

RE: Subsequent EIR #97-04
EastLake Trails/Greens Replanning Program

Dear Ms. Ponseggi:

Thank you for the opportunity to comment on the above project.

1 The EastLake Planned Community has formed a community facilities district (CFD) to provide financing for all elementary facilities required to serve the project. Since this subdivision is a part of EastLake, school mitigation has been satisfied through participation in the CFD.

2 The Chula Vista Elementary School District has built two of the four school planned for the EastLake Community. Staff, in collaboration with The EastLake Company, is planning for a third school within CFD No. 1. An agreement with Tucker, Sadler & Associates for design and construction services at the EastLake Trails school site has been Board approved. Construction of the school is currently projected in the year 1999. We hope that grading will occur in the near future so a "super pad" site can be turned over to the District. Both Olympicview and EastLake Elementary Schools are heavily impacted by enrollment.

If you have any questions, please give me a call.

Sincerely,

Lowell Billings, Ed.D.
Assistant Superintendent for
Business Services and Support

LB:dp

Responses to Public Comments

1. These comments concur with the conclusions noted in the draft SEIR regarding school impacts and mitigation.

2. Comment noted.

San Diego County Archaeological Society

Environmental Review Committee

9 August 1998

To: Ms. Marilyn Ponseggi
Environmental Review Coordinator
City of Chula Vista
276 Fourth Avenue
Chula Vista, California 91910

Subject: Draft Supplemental Environmental Impact Report
Eastlake Trails/Greens Replanning Program
EIR #97-04

Dear Ms. Ponseggi:

I have reviewed the cultural resources aspects of the subject DSEIR on behalf of this committee of the San Diego County Archaeological Society.

1 Based on the information provided in the DSEIR, we agree that the project should have no significant impacts to archaeological and historical cultural resources. Consequently, no mitigation measures are required for this category of issues.

Thank you for including SDCAS in the City's environmental review process for this project.

Sincerely,

James W. Royle, Jr., Chairperson
Environmental Review Committee

cc: RECON
SDCAS President
file

1. Comment noted.

MEMORANDUM

August 13, 1998
File No. 0600-80-ET001P

To: Bob Leiter, Director of Planning and Building

Via: John Lippitt, Director of Public Works

From: Cliff Swanson, Deputy Public Works Director/City Engineer

Subject: Comments on Draft SEIR - Eastlake Trails/Greens Replanning

Following are our comments on the Traffic Section of the subject draft SEIR.

Section 4.2.4 sets out mitigation measures for the year 2000 (without SR-125). Sections 4.2.4.1 and 4.2.4.2 set out mitigation measures stating:

1 *Provide a fourth eastbound lane and a third northbound right-turn lane, as planned by the City in the future, at the East H Street and I-805 southbound ramp intersections; and*

Extend Olympic Parkway eastward to Paseo Ranchero or beyond. The LOS improvement at the Telegraph Canyon Road/I805 (LOS F to LOS C) southbound ramps intersections between years 200 and 2005 is principally due to the Olympic Parkway construction.

These mitigation measures were derived on the basis of existing roadway segment volumes and intersection conditions as calculated by the 1994 Highway Capacity Manual (HCM) method. These calculations indicated that East H Street from I-805 to Terra Nova Drive had an LOS of E and Telegraph Canyon Road from I-805 to Paseo Del Rey had an LOS of F.

For this methodology, the theoretical capacity of a given street is estimated based only on the number of lanes and its classification. The theoretical capacity for two different street is the same if they both have the same number of lanes and classification, regardless of other factors such as grades, side friction, number of intersections, turn lanes at intersections and other environmental factors. The analysis then projects anticipated volumes based on land uses and compares it to the theoritical capacity of that classification of roadway. Depending upon the percentage of capacity that is projected, a level of service is applied to the segment. In a like manner, the theoretical capacity of an intersection is calulated based on theorical numbers. This method is an extremely valuable tool for planning purposes, but under actual conditions is often quite conservative.

Each year the Engineering Division prepares a report for the Growth Management Oversight Committee (GMOC) on the results of the annual Traffic Monitoring Program (TMP). This program assesses the operating performance of the City's arterial street system for compliance with the Threshold standards of the Growth Management Plan. The January 1998 report stated that: *This year's study indicates that all arterial segments evaluated during each time period operate at LOC C or better except for the westbound direction of Palomar St. (From Broadway to the I-5 northbound ramps) which operates in the upper half of LOS D for one hour during the evening (from 4:00 - 4:30 PM and from 5:00 - 5:30 PM).* Specifically related to East H Street, the report identified the segment from I-805 to Southwestern College Entrance as operating at LOS

Responses to Public Comments

1. The traffic study noted several improvements at the East H Street/I-805 southbound ramp intersection to mitigate the significant impact during the Year 2000 at this location. Specifically, it should be noted that the traffic study shows that the extension of Olympic Parkway eastward to Hunte Parkway also mitigates the identified cumulative impacts at the subject intersection. The City of Chula Vista is currently in the design phase of the improvements to Olympic Parkway and implementation of this extension can be substituted for the specific intersection improvements described in the draft SEIR. The final SEIR has been modified accordingly (page 82).

B in the AM peak period, B in the mid-day peak period, and B in the PM peak period. Telegraph Canyon Road had overall acceptable service levels also and was not specifically studied during preparation of the report because the segment which included the part from I-805 to Paseo Del Rey has always had a higher level of service and was not considered critical to measure every year.

While the SEIR identified these particular locations as needing mitigation measures for the year 2000 (without SR-125), the Traffic Impact Analysis and model runs showed that these improvements were not needed after the construction of alternate facilities, including SR-125 nor at build out. Thus, funds used for those improvements would be unnecessarily wasted. It should be noted that, for the most part, that the alternative improvements which would alleviate the problem have already been identified by the City's Capital Improvement Program (CIP) and projects are underway which will ultimately address the capacity issues in both these areas. First, the interchange at Telegraph Canyon Road and I-805 is in the current budget and construction is expected to begin prior to the end of 1998 with completion by the end of 1999. This schedule is somewhat dependent upon completing all of Caltrans' requirements and entering into an agreement with that agency. Widening and other improvements, including ramp widening and re-alignment, to increase capacity along Telegraph Canyon Road and remove the existing trap lane[1] will be accomplished in that project.

Second, the City is working on upgrading and widening the I-805 and Orange Avenue/Olympic Parkway interchange in conjunction with Caltrans. The City is also completing a financing study for the missing link of Olympic Parkway between Brandywine and Hunte Parkway. The financing study is scheduled to be completed by the end of 1998. Following completion of that study, which will identify the funding option for completing this expensive missing link, the City will begin the design and environmental process for actual construction.

Traffic studies have shown that both of these projects will relieve the impact of traffic on East "H" Street by providing better alternative routes. Build out traffic studies have indicated that the existing roadway on East "H" Street will be sufficient to handle the build out volumes and that any interim widening between I-805 and Terra Nova Drive will, in effect, be a throw away.

In addition, the City has a project for the widening of the I-805/East "H" Street interchange included in the five year CIP. However, because these improvements are not currently critical as shown by the TMP studies, and would not provide overall benefit between I-805 and Terra Nova Drive, the project is not being actively pursued. Further, the project study report prepared under Caltrans' oversight did not identify a long term need for the added ramp widening.

Another item of importance is the existing classification of EastLake Parkway as a four lane major roadway from Otay Lakes Road to Clubhouse Drive and the mitigation measure which calls for a six-lane major. The northerly segment, from Otay Lakes Road to Greensgate Drive, exists today with dual left-turn capability at both Greensgate Drive and Otay Lakes Road. In addition, dual

2

[1]A "trap" lane is a through lane on the surface street which becomes a turn lane onto the freeway on ramp "trapping" motorists into having to get onto the freeway or changing lanes to continue driving through on the surface street.

Responses to Public Comments

2. In response to this comment, additional intersection analyses have been performed for EastLake Parkway at Otay Lakes Road, Greensgate Drive, and Clubhouse Drive. The analyses were conducted for the Year 2010 and buildout. These intersections are calculated to operate at LOS D or better in both the AM and PM peak hours. As such, the potential street segment impact on EastLake Parkway between Otay Lakes Road and Clubhouse Drive is not considered significant. The final SEIR has been modified accordingly (page 85).

left-turn lanes exist at Clubhouse Drive. The Cumulative Mitigation for Year 2010 with SR-125 to improve EastLake Parkway from four to six lanes may not be needed since the level of service "D" capacity is 56,300 vehicles per day instead of the 33,800 used for a buildout volume of 37,300. Since intersection analysis results are more indicative of future roadway operations than street segment analysis results, an intersection analysis should be completed at the three intersections of EastLake Parkway with Otay Lakes Road, Greensgate Drive and Clubhouse Drive utilizing the full existing intersection geometrics which include the dual left turns. Intersection geometric improvements which are not yet utilized due to current striping could show that the segments north and south of Greensgate Drive will operate satisfactorily within the existing street cross section.

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MINUTES OF A SCHEDULED REGULAR MEETING
Resource Conservation Commission
Chula Vista, California

DRAFT

6:30 P.M.
Monday, August 17, 1998

Conference Room #1
Public Services Building

CALL MEETING TO ORDER/ROLL CALL: Meeting was called to order at 6:38 P.M. by Chair Yamada. City Staff Environmental Review Coordinator Doug Reid called roll. Present were: Commissioners Bull, Fisher, Marquez, and Yamada, and staff member Rick Rosler. Commissioner Burrascano was absent; no vote taken to excuse her from meeting at this time. Commissioner Thomas arrived late at 6:45 P.M. Also present were representatives for the Vanguard Self Storage, Otay Ranch and Eastlake Trails.

APPROVAL OF MINUTES: Minutes from the meeting of July 13, 1998 were not approved due to lack of quorum from that meeting.

ORAL COMMUNICATIONS: None.

NEW BUSINESS:

The agenda items were taken out of order so that a quorum with Commissioner Bull would be present for items #3 and 4.

Item #4 - Review of Negative Declaration IS-99-01, Vanguard Self Storage:

Doug Reid presented an overview of the negative declaration. There was a question on page 2 regarding the wording with the facility averaging "one customer per month." It was clarified by the project representative that there would be an average of one customer *visit* to their own unit per month and that was only part of the project traffic generation. Commissioner Fisher was concerned about lighting facing away from the Sweetwater River so as not to disturb animals moving through the corridors. It was explained that the freeway is raised and serves as a buffer between the project site and the River. Further, performance standards with regard to glare from the lights must be complied with.

[Commissioner Thomas arrived at 6:45 P.M.]

After a brief discussion, it was MSUC (Bull/Fisher) to recommend approval of Negative Declaration IS-99-01; vote - 5-0, motion carried.

Item #3 - Negative Declaration IS-98-19, The Church of Jesus Christ of Latter-Day Saints: Gary Williams was the representative for the Church. Doug Reid presented a brief overview of the project. The zoning for the church site was confirmed to be correct. The small open space on the corner of the lot is owned by Otay Water and will be left as open space. An evaluation of the Rancho Del Rey Parkway already has a potential to put stop signs at the corner on Huerta Street to mitigate the traffic impact at the project site. A study was also done to relocate the entrance of the parking lot.

It was MSUC (Bull/Thomas) to recommend approval of the Negative Declaration IS-98-19 as adequate; vote 5-0, motion carried.

A second motion was made (Thomas/Marquez); vote MSUC 5-0, to add the following comments with regard to the Negative Declaration IS-98-19:

a. to minimize night lighting and direct it away from open spaces so animals could freely move across connecting corridors;
b. that hydroseeding be done with non-invasive species and be managed carefully;
c. a request that the Safety Commission look into installing a stop sign at the intersection of the project site for traffic control.

Commissioner Bull was excused from the meeting at 7:00 P.M. due to a conflict of interest on Item #1 Otay Ranch and Item #2 Eastlake Trails.

Item #1 - EIR-97-03 - Otay Ranch:

Doug Reid stated that the project is currently in the 45-day review stage on the State level and is scheduled for a hearing before the Planning Commission on August 26, 1998. He presented a summary of the project to the RCC, pointing out some of the significant changes in each Village as follows:

Village 1 - is amended to increase allowable single family vs. multi-family units;
Village 2 - moves the new high school (approximately 50 acres) and relocates the community park (approximately 25 acres) to Village 2 West;
Village 6 - reduces density in the Village core;
Village 7 - allows additional residential homes in the same location to replace the high school which is now moving to Village 2;
Village 13/15 - areas of development are deleted and replaced with more open space.

Bruce McIntyre of Lettiere, McIntyre & Associates answered questions on the Significant Land Use Impacts. He noted that the biggest incompatibility issue was moving the proposed high school and park adjacent to the Otay Landfill. Commissioner Thomas asked whether the County had done new and updated studies on toxic fumes from the Landfill and how they would affect the adjacent sites. Levels outside of the 1000-foot buffer area were reported to be below the threshold of significant impact.

Traffic - There were no significant impacts on traffic in modifying the Village areas. A light rail station and park and ride facility will be located in the Village 1 core. The GDP lists specific traffic information upon build-out and will also be delineated on the Final Map. Specific studies done on the cumulative impacts at Otay Lakes Road and Paseo Ranchero were found to be significant and non-mitigable without SR-125.

Biology - SPA 1 Amendment Area will lose open space but will increase about 34 acres overall.

Village 13 and 15 would delete 256 acres of development area and Village 1 and 2 will gain 236 acres. Restoration for maritime succulent scrub will be done around the time of grading. June Collins of Dudek Associates added that the project currently being reviewed is the beginning of implementation of the overall MSCP. The total increase of the project development area is approximately 313 acres. About 347 acres of development would be committed to open space in addition to the overall 11,375 acres of the project.

Commissioner Thomas requested that the report include other surrounding areas as it is important as the RCC reviews the document. With regard to questions on drainage, the entire drainage system of Poggi Canyon is currently analyzed as part of the Otay Ranch.

Landform Visuals - Steep slopes on Otay Ranch as a whole will not exceed the encroachment of 83%. Any steeper slope grading may impact this project specifically but will not exceed the limits projectwide. The specific plans are also identified in a separate report on the Otay scenic roadways.

Cultural - It was reported that some other residential resource areas will be lost but was not a significant direct impact.

Air Quality - no significant direct impacts.

Noise - The light rail will not present any cumulative noise impact to residential areas.

After staff consultation, the following proposals were included in the project alternatives:

a. Move proposed high school out of the land adjacent to Otay Landfill to Village 2, which is mostly residential.
b. All but five acres of parkland adjacent to the landfill be returned to Village 7 to make it more centrally located.
c. Move more community purpose facility back to Village 1.
d. New industrial in quadrant adjacent to the Otay Landfill. A cap is placed on the number of traffic trips to the proposed industrial areas.

Comments and questions by the RCC included the following:

Commissioner Thomas asked whether a study on the effusion of methane gas was done on the Otay Landfill site. An analysis was redone this past year and a separate EIR is also being done.

Commissioner Thomas also asked about paleontological finds and whether they go to the Natural History Museum. Any finds are currently preserved at the museum. Archeological sites were identified in the original study. Thomas would like those studies reviewed again. It was noted that additional field surveys were conducted for this project.

Commission Fisher had great concern with the lack of biological open space, especially the stretch located along Olympic Parkway, the adjacent Sunbow project and the industrial quadrant located next to the Landfill. Other major biological concerns included the following: Records of the whip tail were not brought forward from previous studies. There are no connective lands which leaves the original reserves to preserve corridors of habitats. The mitigation does not adequately replace acreage lost from grading on sensitive lands. Grasshopper sparrow was not covered by the MSCP. Other sensitive species such as the burrowing owls, badgers and cactus wrens would be forced from their natural habitat by the project which now becomes a regionally significant problem. The project does not preserve adequate lands for these habitants and does not clearly indicate the significant and non-mitigable impacts. He also felt that the MSS restoration was not adequately addressed. With regard to the cactus wrens, it was noted that criteria was met within the MSCP Study Area but not within Otay Ranch. Commissioner Fisher strongly noted that he disagrees with the conclusion of the document.

Commissioner Thomas reiterated the necessity of overlay maps which indicate watersheds, land uses, development, migration pathways, etc.

Commissioner Marquez expressed her concern over the interior protocol surveys on avian corridors. June Collins explained that the avian corridors did not exist but at one time were to be created. The study should look at serving more of the total corridor to include Wolf, Poggi, Telegraph and Rice Canyons. Ms. Marquez noted 11 pairs of gnatcatchers were shown on the map but it was unclear whether these were in addition to those already found. The maps should adequately reflect its findings.

It was clarified mixed chapparel and coastal sage scrub is located south of Otay Lakes Road. With regard to the achnatherum population, the conclusion of the study shows no thornmint on SPA 1.

Commissioner Yamada had concerns with the "borrowing on the future" approach. He felt that different scenarios should be studied adequately to prepare for the future. He commented that traffic moving east to west created a greater impact on 805. It was explained that when SPA 1 was done, SR-125 was not considered so the direct impact would be on 805.

A motion was made (Fisher/Marquez) that the EIR-97-03 - Otay Ranch is inadequate due to a series of species inadequately analyzed or sufficiently mitigated; vote MSUC 4-0.

A second motion was made (Thomas/Marquez), vote MSUC 4-0, to recommend the following with regard to Otay Ranch:

a. Study the metapopulation ranchwide and do a quantitative analysis of individual species and habitats;
b. Study the cumulative impact of the effects of losing Poggi Canyon with regard to regional, biological, geological and paleontological concerns as it relates to other connecting canyons;
c. Consider a local program for retaining paleontology and archeological resources;

d. Request the City review the "mortgaging the future" short-term policies and perform an evaluation of different scenarios going out for future;
e. Conduct studies of the biological value of what's going to be developed vs. not developed lands to make sure tradeoff is comparable;
f. Note that historical sitings of sensitive species need to be shown where appropriate on EIR maps.

Item #2 - EIR 97-04 - Eastlake Trails

Doug Reid introduced this item and staff and consultants were available for questions. Louis Hernandez, the project manager, was also present.

Lee Sherwood explained the traffic study conducted with various scenarios. The direct impact reports are found on pages 81-83 of the report. He noted that the impact on Lane Avenue and Otay Lakes Road is unmitigable and it would take building eight lanes to mitigate.

Biological resources had not changed considerably since the last study. He explained that mitigation to impacts on the wetlands in Salt Creek is at a 2:1 ratio.

Ms. Marquez questioned whether the trolley extension would go through the project area; Mr. Sherwood stated it would not.

Ms. Thomas asked about the storm drain outfall and whether hydrologic studies had been done. It was explained that the design and volume runoff meets the City's requirements. Maintenance requirements of pesticides to meet required standards will be enforced and the use of recycled (gray) water are being studied.

Mr. Fisher was concerned about agricultural land used to preserve sensitive species and wildlife, particularly the habitat of burrowing owls, badgers and jack rabbits. He noted that Salt Creek is a wildlife corridor and that Eastlake is the only conduit of movement. He questioned how human recreation affected movement in those corridors. Mr. Fisher requested that there be minimum lighting through the Park. Other comments and concerns included the vegetation map was not adequately reflected; it was unknown whether the seasonal ponds introduce exotic species; hydrology concern and its impact downstream; enhance waterways through growth of willows.

Ms. Marquez requested the report address approximately 100 feet outside of the perimeter of the project that is effected biologically. Her concerns were with regard to water that the ratio needs to be made more clear in its report; no mitigation is proposed for loss of agricultural lands; questioned whether storm drainage went into riparian lands; questioned the erosion control from upward first flush issues and how it affect the urban drainage system.

A motion was made by Thomas that the EIR report was adequate. No second; Thomas withdrew her motion.

It was MSUC (Fisher/Marquez), vote 4-0, motion carried, to accept the EIR 97-04 Eastlake Trails with the following requirements:

a. surveys for sensitive species be done so it is consistent with the Subregional Plan;
b. study Salt Creek wildlife and movement to see the total impacts;
c. that the project consider first flush mechanism on drainage system;
d. create wetland or pond onsite so that exotic species' biological impact of pond does not affect Salt Creek;
e. planting of greens be considered with the flow downstream to Salt Creek natural areas of Otay Ranch as required by City conservation easement.

STAFF REPORT: Doug Reid reported there might not be a meeting on August 31 and will confirm that with the Commission. Next meetings are scheduled for September 14, October 5, and October 19.

The Planning Department has been combined with Building and Housing to the Planning and Building Department.

CHAIRMAN'S COMMENTS: Chair Yamada asked the RCC to consider a contribution to San Diego Hospice or some other memorial in the name of Ken Lee. Donations will be accepted at the next meeting.

COMMISSIONER'S COMMENTS:

Commissioner Marquez asked that Doug Reid clarify Cindy Burrascano's not being reappointed to RCC by Mayor Horton. Mayor Horton was not aware it would create two vacancies so she did allow Cindy to serve on the Commission until a replacement was appointed.

Commissioner Marquez had great concern for the deliberate non-reappointment of Cindy Burrascano who has the most historical knowledge of past projects, served faithfully for six years as Chair or Vice Chair, has had limited absenteeism, and always came to the meetings prepared. Her lack of reappointment is an insult to all commissioners in all commissions, especially in light of the unfilled vacancy on the RCC since June 1997 and many other vacancies on this Commission in previous years.

Commissioner Marquez requested a memo on the update of the MSCP. Doug stated that the Subarea Plan was planned for consideration about the first of the year.

It is noted that RCC would need to re-elect a Vice Chair at the next meeting because Burrascano was not reappointed.

Commissioner Fisher noted that there are two vacancies on the RCC because Cindy Burrascano was not reappointed to fulfill her term as allowed by City ordinance. He requested an explanation from Mayor Horton as to her decision not to reappoint Cindy. He also requested this item be put on the next agenda.

Responses to Public Comments

1. Pursuant to this recommendation from the Resource Conservation Commission (RCC), the City of Chula Vista directed that surveys be completed for burrowing owls, the San Diego black-tailed jackrabbit, and San Diego woodrat. These surveys were undertaken by RECON during August and September and none of the species was observed. The results of these surveys have been incorporated into the biological technical appendixes of the final SEIR. Surveys for State and federally listed species (i.e., Otay tarplant and quino checkerspot butterfly) were completed in 1998 during the preparation of the draft SEIR and these species were not observed during the surveys.

2. Given the disturbed agricultural lands bordering both sides of Salt Creek within the project site and the approved Salt Creek Ranch development, as well as the location of Otay Lakes Road immediately to the north, a north-south wildlife corridor has not been defined within the EastLake Trails property by the City of Chula Vista. The City of Chula Vista's Draft Subarea Plan does show habitat preserve areas/corridor areas east of the site along the west side of Lower Otay Reservoir which connect to "relatively narrow tributary canyons averaging 600 feet in width" (City of Chula Vista 1996) within the Salt Creek Ranch project site. In addition, Salt Creek Canyon within the EastLake project site was not identified as a wildlife corridor in the Otay Ranch Resource Management Plan (1993).

3. As described on pages 100 and 105 of the draft SEIR, mitigation measures have been incorporated into the project that would avoid adverse water quality impacts (e.g., "first flush") in the Salt Creek natural drainage course. In addition to the proposed on-site revegetation within Salt Creek, which will act as a natural filter, the project must also implement Best Management Practices that comply with the Regional Water Quality Control Board NPDES Permit.

4. Should the pond be retained as part of the final project site design at the tentative map approval stage for the project, use of exotic plants and animals in the pond would be prohibited in order to avoid indirect effects off-site within Salt Creek. This issue will be addressed to the satisfaction of the Director of Building and Planning in the final mitigation plan developed for Salt Creek.

5. On-site plantings within the Salt Creek corridor would be completed pursuant to the concept revegetation plan described in the draft SEIR as approved by the City of Chula Vista and the wildlife agencies (California Department of Fish and Game and U.S. Fish and Wildlife Service). Revegetation within the corridor would consist of the creation of native habitats (e.g., willow woodland) to avoid the potential for indirect impacts off-site to the south within Salt Creek from invasive exotic species.

   In addition, should the restoration plan not be implemented, then the Salt Creek drainage on-site would be retained in its current condition. While the degraded wetlands would not be impacted under this scenario, the existing functions and value are low and it is likely that invasive and non-native species would continue to invade the wetlands. The resulting overall habitat quality of the Salt Creek corridor on-site would be significantly less if the restoration plan were not implemented.

Commission Thomas has been impressed with Cindy Burrascano's dedication to the RCC and would like to see her back on the Commission.

ADJOURNMENT: The meeting was adjourned by Chair Yamada at 10:35 P.M.

Respectfully submitted,

EXPRESS SECRETARIAL SERVICES

Barbara Taylor

Barbara Taylor

PLANNING COMMISSION
August 26, 1998

Public Hearing Testimony

TRANSCRIPT

1. **PUBLIC HEARING:** **EIR 97-03; Draft Subsequent Environmental Impact Report for Otay Ranch SPA One West**

Public Hearing Opened 8:00

"Chairwoman, Commissioners, my name is Kim Kilkenny an I'm with the Otay Ranch Company; I appreciate the opportunity to address you this evening regarding the Environmental Impact Report.

My understanding of the proceedings tonight is solely to take comments on the adequacy of the EIR, close the public comment period on the Environmental Impact Report. As a consequence, we are not prepared nor are we inclined tonight to give you full testimony in support of the project or rationale in support of the project, but however, just to respond to questions and explain some things that may be confusing in the correspondence that you received on the EIR. So I will have an opportunity and I appreciate it, to respond to Commissioner Ray's comments early on.

I think it is important to emphasize why this plan amendment is before you. There are essentially three reasons: one is, when the specific plan was approved, we were required to relocate the high school to a more norther location because the school district and your Planning Department concluded that it was going to be needed sooner, rather than as opposed to later.

The same rationale applied to the community park which is located at the southern end of Village II, we were asked as a required condition of our SPA to apply to move it northward because the Planning Department thought at that time that it had to move northward to be accessible in a timely manner.

The third reason is the MSCP program which has evolved in the intervening years between the adoption of the General Plan, the adoption of the Specific Plan, and to date, where the MSCP is a real plan on line. It is important, I think, to remind you that there are policy provisions in the General Development Plan that we comply with the MSCP whenever it was going to be adopted. And so, we're sort of in the MSCP game, regardless.

In that regard, allow me; - I notice the clock ticking down, so if I may ask your indulgence for some additional time because I know I will not be able to respond to the questions. In that regard, let me explain a history of the MSCP process and how Otay Ranch fits in it and how we were able to make the trade offs that the Commissioner asked about early on.

As I mentioned before, we have to comply with the MSCP. The City of San Diego and the Federal government were the lead agencies in the creation of the MSCP. It has subsequently been adopted by the County of San Diego in their plan incorporates all of Otay Ranch, including that portion which is in the City of Chula Vista. So, a lot has happened in the last several years relative to the MSCP.

Quite frankly, relatively; - I don't know if I dare ask, but if you can get the General Plan up there. With the declaration of the California Gnatcatcher as an endangered species; that placed the Federal government and the State government more or less as one of your partners in land use planning because they have effective veto power over any area to be developed that has habitat for the California Gnatcatcher. So like it or not, not only the City of Chula Vista, but property owners are required to deal with those agencies.

From our personal perspective, we think that adopting an MSCP on a regional basis is a good idea. We are far better off to deal with 83 species at one time and define a plan that says, "yes, this is buildable; no, this is not buildable", and to approach environmental management and the protection of key biology in a systematic way, we think that is a positive public policy program. We didn't always agree with what the regulators asked of us, but it is a public policy program that worth supporting.

Out dealings with Fish and Game and Fish and Wildlife, at the end of the day, we ended up giving up these three development blobs on the resort. For those of you who have taken tours of the site, this is the portion that is east of that pretty spectacular canyon that is physically separate from the rest of the resort site. The resources agencies wanted it because it is contiguous to a major wildlife corridor that goes through this portion of the San Ysidro Mountains on over to Proctor Valley. They were fairly adamant that we would never build on that piece of property.

Second area that the Resource agencies are adamant that construction should never happen is all of the area southeast of the lakes. The Commissioners that we here at the time of the approval of the General Plan, I think we will recall, that we fought very hard that we would be able to build southeast of the lakes, and frankly, gave up lots of concessions to be able to build south of the lakes and have a lot of regulations imposed in the plan today that never would have been there, but for our desire to build out this community. However, because of the resources there and the adamancy of the State and Federal regulators, it is going to be exceedingly difficult to build over there.

Our personal situation is such that we only own 120 acres here, at the tail end of the development pattern. If you have your EIR's, if you'll look at figure 3.4 and 3.5, you will see the effect in terms of the loss of land due to our application. I don't recall specifically the number of units lost in this village, but my recollection is that we're talking in the neighborhood of 14 to 20 units because it is a large lot area.

Environmentally, I don't think that we were ever able to build there because of the feelings of the resource agencies. Practically, let me give you another consideration. This portion of the property is owned by a separate property owner. This portion of the property is owned by a separate property owner. For us to gain access to these 14 homes out here through two separate ownerships, over a 2.5 mile piece of land that is environmentally constrained; I didn't see it happening over the next two or three months. So, we made a business decision to forego this piece of property. So, in response to your question, that was our rationale."

Commissioner Ray

"That goes directly to one of my comments, which was that this is, in fact, the direct result of the split of the ownership of the property because this discussion did take place between the City and the County and yourself a number of years ago when this plan was developed."

Kim Kilkenny

"As I testified to years ago, and believe today; there are certain components to the Otay Ranch Plan that were going to be able to be implemented that represented unique opportunities because you had a single owner, or single control. There will be some components of the Plan that will be exceedingly difficult, if not impossible, to implement because we have broken up ownership. I will tell you, no one regrets this more than I do; but it is, what it is, and we're moving forward. It is in our self interest to reach an agreement with the resource agencies on an MSCP; it is in Chula Vista's interest. The resource agencies can effectively stop, in my judgment, what is a key transportation link in Chula Vista, and that's Olympic Parkway.

Olympic Parkway is surrounded on the edges by Coastal Sage and other habitat types that are very important and unless the City of Chula Vista is able to strike a deal with the resource agencies on the MSCP, it is going to be exceedingly difficult to build this road, its going to be exceedingly difficult to do anything in the green portion of the university site. I personally advocate the City of Chula Vista reaching its peace with the resource agencies relative to the MSCP; as difficult as that is, and that's not a pleasant task - I will confess that readily.

That responds to that issue, the density issue is a little bit more complex. Let me, for the benefit of the commissioners who weren't here during the General Plan, let me repeat at least my understanding of the history because some of these numbers get a little bit confusing.

The Metropolitan Transit Development Board (MTDB) has always advocated very high densities in the Village Core to make transit viable. When we were going through the General Plan process, they advocated 25 dwelling units per acre. Your Commission, the County Planning Commission and staff was comfortable with around 16.5 - 14.5, that neck of the woods, a density in the transit villages. When it went to the Board of Supervisors and

the City Council jointly, they opted for a medium ground of around 18 du per acres.

It is important to note, as Commission Ray elicited in comments, that unlike other plans. this isn't a target density, this isn't a range of densities; for the General Plan, it was an absolute number, "You shall have that number of multi-family units in the Village Core". When we went to the SPA plan and implemented that through the Specific Plan and through the Tentative Map, what happened is that when you took 18 units per acres gross density, general plan, removed curbs, gutters, sidewalks, streets, set backs, what-have-you, and place that on a piece of property, we ended up in the Specific Plan, or in the SPA Plan, with 34 units to acre, 36 units to acre, - densities that we thought were not viable in the market place and we thought were not viable in the community.

The City Council felt the same way, requested that we look at a General Plan Amendment to modify these densities. We made an amendment to lower the densities to 14.5 in the General Plan number, staff objected to that and the alternative plans come forward with the densities that are before in the alternatives.

I am of the opinion, your staff has already indicated they're comfortable with it; we're comfortable with it; MTDB I think, when they look at the land plan and look at the number of units within close proximity to the transit station, and how access is provided to those units, I think they will be comfortable with it and its something that we can all live with it. That, at your public hearing will report back on because we'll be working with MTDB in the intervening months.

One last point that I want to make, and I think Rick did an excellent job of highlighting it, but I know that it has created some confusion in the letters that you've received. Our practice in pursuing a project is to make our best shot in an application and that reflects our application over there. And then, as we go through the public comment period, the environmental review process, your Commission, alternatives are formulated and your staff went to those alternatives and at the end of the day, we always end up supporting an alternative. Today, our perspective is that we tend to support alternative A. Your staff tends to support alternative C; there are a hand full of differences between the two of them, and frankly I hope in the coming weeks we can do more study and iron those out and when we get before you in a hearing situation we have the differences of opinions down to a precious few.

One item that I ask your indulgence on in the public hearing; one thing that we want to do is to give you a brief summary of where we are in implementing the project. One of the fears that I have had over the last nine years is that when we move dirt, and we build roads, and we build homes, that it was going to be very hard to meet the expectations of Otay Ranch. Over the last several years, we have made lots of promises, lots of commitments, I think articulated a vision, a dream that this will end up being a very special community. I am please to report, now that we have graded a significant portion of the site, and now that we

prepared improvement plans, prepared park plans and landscape plans and know what the housing stock is going to look at in many instances, that from my perspective, from someone who has worked on this project for many years, I am very pleased that the Village concept that your commission helped develop and endorse, the Council and the Board of Supervisors did, I think its going to find itself on the ground in Otay Ranch in a matter of months and is something that not only our Company, but the City of Chula Vista will end up being very proud of and will be successful in the market place.

With your indulgence at the next hearing, I would like the opportunity to go through where we are specifically on the ground and show you specifically how the project is being implemented. Every once in a while I hear rumblings when you go through an amendment process that we're plan busting or we're abandoning the village concept. I am personally committed to it, I think the Company is, and I think that when you see what is on the ground you will think that we were successful.

If you have any questions, I'll be happy to try to answer them."

Commissioner Willett

"I would like to compliment you on your discussion and running it through us; its a very complicated procedure and I support that what you were just talking about a milestone of where you at; have an overview of Village One West so that we can see a time line of how it is progressing vertically and horizontally.

Katy Wright, Sweetwater High School District, 1130 Fifth Avenue, Chula Vista

"You've heard that your staff and the district have not been comfortable with the high school site as shown and described in the project; that is correct, it not only is incompatible, its not acceptable to district nor the Department of Education, which has rejected it. I think we're all in agreement now that the alternative site in alternative A,B or C which indicates site S4 is acceptable to the District in terms of location of the high school site, however, we have a couple of issues we're not sure the EIR has adequately addressed and we want to bring to your attention. It is the following.

First of all, we need a 50 net acre site and what is described as a gross acre site with very large slops and d we need a 50 net acre site. We've discussed this with the applicant and we sure have a conceptual agreement, but we want the record to reflect that it does need to be a 50 net acre site. The plan also shows that a one access point and we ultimately need two as it has been discussed, but it has not been reflected in the document. We also need the site to be graded to our district standards,; that is also not reflected within the document, though we have a conceptual agreement from the applicant that we will provide that, but again that is not reflected in the document. That's the issue this evening.

Perhaps most disconcerting is the timing of the infrastructure. If we need the school site as our ability to require it at the 1400th building permit, and that is 1400th permit in Village One and Five combined. That number could be reached fairly rapidly and as you notice where the site is located south of Olympic Parkway. The timing of infrastructure to that site could be problematic and is not addressed in the EIR and we think it should be because there could be some impacts with that and now as we hear this evening, MSCP complications. I don't think those two issues are addressed with the timing of the infrastructure.

Finally, we have in our letter some suggestions and refinements in the mitigation measures we'd like to see reflected that both reflect our school mitigation agreement with the applicant and better represent the needs that allow the school impacts to be mitigated through this project.

I'd be happy to answer any questions."

Commissioner Ray

"I guess I have two; one is, what are differences in the school requirements for grading standards vs. the City's."

Katy Wright

"We want a site that is graded +- 1%, a slight fall; this has about a 50 foot fall from the top to bottom as represented on this document and its got like 75 foot slopes on Olympic Parkway. Its tough for our buses to access that way. There is maintenance issues and durability issues of the equipment, plus just plain access and maintenance."

Commissioner Ray

"What would the slope percentage be for the driveways, - I guess they only go down at Hilltop and you go up and down at Bonita. Do you know what those percentages are?"

Katy

"I don't know."

Commissioner Ray

Secondly, and this has always been kind of a sticky point with me. There was a lot of discussion about the utilization of Eastlake High School when it first opened and how underutilized it was vs. the overcrowding at Bonita and the requirement for temporary trailers. I forget if it was in this Commission or GMOC that I was told that you have to reach a certain threshold standard of overcrowding (as I term it), the District calls it something

else, at a neighboring high school where kids would have the ability or the right based on grandfathering, or whatever the terms is, to go to the existing high school as opposed to the new one that is close to their home. Has the district look at changing some of those policies so that that type of discussion does not have to happen every time we build a new school?"

Katy

"I think you've asked a series of questions there. I think you question is; is there an overcrowding issue or a threshold that has to be reached at other sites before we start construction. The answer is that we are at or very near capacity at all of our sites. We've got 19 school sites right now; Jr. High School and High School sites and we did an analysis the other day. We have about 500 empty seats. Depending on when you analyze that in the school year, its either better or worst. The capacity that we have existing on the ground, there is a permanent capacity and then a temporary relocatable number. Those two combined, allow us to meet the demands today. We have the ability to do some additional expansion, about 60 or so more relocatables, on any of our sites in our district, which will give us the ability to meet demand over the next several years, and then, we're plain all out of room. We are underway for our next high school down at Otay Mesa and these will be tracked and we will bring them as fast as we can in a timely manner as needed as development dictates. We can't open it when we're overcrowded by just 1,2 or 5 kids; it more like half a school, just from a cost efficiency standpoint."

Cmr. Ray

"I understand, I was just trying to relate it to what had happened at the Eastlake facility and the request here, or your comment, that this needs to be accelerated somewhat. I know that in Eastlake; Frank maybe you can answer this; isn't Eastlake still jointly being used by a middle school?"

Katy

"Right now the Rancho del Rey Middle school students, about 600 down in this new corridor are being temporarily housed at Eastlake High School. Up until this most recent semester they were in unused space, or not efficiently used space at Eastlake High School and that has been taken up by additional high school student and now they are in mostly trailers and relocatables now on a temporary basis until we can move them to the middle school under construction which will open in October of this year."

Cmr. Ray

"Lastly, is student count based on physical bodies on a chair, is it counted in enrollment, how do kids who are drop outs counted. I've heard a number of things and Serafin Suarez, President of Southwestern and I have had this discussion. They count them differently and

I don't know if its they way they do it at the college level vs. High school, but the way I understand it is that the counts are not really true bodies; its a name or a sign-up issue vs. who is in the school."

Katy

"We count true bodies in seats on a given day and time as a standard. Its called a CBEDS day, a day in October which is a State standard. We count bodies in seats on that day and that's the number that we use as our planning threshold number as a standard year to year. Its not to say that its that number all year long because unfortunately we have drop outs, we have people that move etc. It changes through the year, so it depends upon the given day, but for a consistency number, we use the CBED number. That's the number I quoted you that we have capacity in the CBED's number and we have 500 empty seats."

Cmr. Ray

"Just lastly, if we were to implement some kind of a phasing for middle schools or any other kind of a joint, people who are currently using a high school facility jointly if we were to phase in their own facilities earlier, would that help alleviate the need for a specific high school to be developed at an earlier time frame. Such as Eastlake, if we had built a middle school before the high school or concurrently with the high school, would that change the way the high school would have to be utilized in regard to the number students and development patterns."

Katy

"We do a forecast of where we're going to be in five years so we keep track of that because it takes us about five years to get a new school on the ground. So, at the time the Eastlake High School was being forecasted, there was a look at do we need middle school capacity; no. What do we need first. Obviously there is a little bit of a numbers game with the State and State funding. Ideally, you have all of the facilities built the day you need them, but the cash flow; 27 million dollars for a middle school and 50 million dollars for a high school, the dollars collected from mitigation and such don't always get there in time to deliver it in time to deliver it. But we forecast annually and what we need next is a high school. Potentially this high school in Otay Ranch and the middle school is somewhere mix there, perhaps concurrent.

Cmr. Ray

"So the joint use concept would probably still be in place because you're going to have some middle school students."

Katy

"Certainly, if that is an option we need to employ, we'll do that - we'll do what we have to do to house kids; we have to by law. Whatever technique is available to us; we're working with the elementary district to house elementary kids on a high school campus. So we'll work with the elementary districts if that will solve the problem."

Chair Davis

"The Growth Management Oversight report this year, I think it was reflective of Chula Vista Elementary School District showed that they were planning it, I believe like a .34 per household of a child that would come to school, but apparently that was off and it really worked out to be about .45 that they should plan for.

Do you know the number for Sweetwater and what that is; has your planning been off or close?"

Katy

"We have been using .29 (.1 for middle, .19 for high school) we don't have any reason to think that it is inaccurate, but we just started a study to test that. I don't have a sense of whether its right or not, I kind of think its low. [RECORDING STATES "POINT" BEFORE THE NUMBER I.E., POINT TWO NINE, HOWEVER, POINT 1 AND POINT ONE NINE DOES NOT EQUAL POINT TWO NINE; - PROBABLY MEANT TO SAY 2.9 - SAME WITH DAVIS' PREVIOUS NUMBERS .45 AND .34].

Cmr. Willett

"I have a question with your letter on paragraph two where it talks about the net usable, it indicates a 50 acre gross. What do you think that footprint needs to be increased to when I'm looking at figure 3.2-4 with f4 backed up to park P-13."

Katy

"It really depends upon the contour; we need a 50 net acre site; whatever it takes to produce that is what we need. I know this was just a conceptual grading plan here, it was not meant to be the ultimate one; we haven't had a chance to work with the applicant to work that out. The end result, it just needs to be 50 net usable acres."

Cmr. Ray

"I just want to hear what Rick's comment is."

Rick

"The footprint would have to be 50 acres and it will be net of the slopes and I that's what Ms. Wright comments are. We'll insure that that happens. If we net out the slopes then we would consider the net usable area of the high school site to be 50 acres and they should be able to put the footprint of their high school on that without any problems and all their uses. We will meet their standards."

Public Hearing Closed 8:25

2. **PUBLIC HEARING:** **EIR 97-04; Consideration of comments on the Eastlake Trails/Greens Replanning Subsequent Environmental Impact Report (SEIR)**

Public Hearing Opened 9:03

Robert Fisher, 512 Patricia Avenue, Chula Vista, CA 91910

"I'm also a member of the Resource Conservation Commission. I had a couple of comments on the issues I wanted to bring up regarding the biology of this Subsequent EIR; I realize it is a Subsequent EIR. One element is the corridor that Mr. Willett pointed out earlier, which is actually a wildlife corridor now. It was identified on the MSCP maps as a corridor linking, - that is the only corridor that exists to the west of Otay Lakes that can move wildlife north and south from Mt. Miguel south to Otay Valley. As such, we have to have an analysis of what the impacts of this park in the northern part of the corridor are going to be. If you look at the park plans they include having kids being in the middle of the wildlife corridor. There is a culvert underneath in Otay Lakes Road that is adequate for the movement of coyotes and bob cats and other animals. The concern I have is that this corridor which may be a really important linkage for our subregional plan may be either broken or we may be putting people in danger by having a wildlife corridor going through the City park.

1

So that's one of my concerns and I think an analysis needs to be done and as RCC we recommended that we approve this with a requirement that they look and analyse this and look at how to deal with this wildlife corridor as a functional corridor and their uses.

In addition, the ag fields there, - they need to be surveyed for several species do live in ag fields in Chula Vista that are things that we need subregional coverage in as part of the MSCP. Those include; jack rabbits, burrowing animals and so there is a suite of species that we recommend in our RCC comments that I suggest you guys take a look at. A survey needs to be done there because we need to understand the cumulative impact of potential take of the ag fields will be to our subregional plan. So that analysis of what this project does, how

1. See responses 1-5 above to the RCC comments on the SEIR.

it fits into what we need to do as a Chula Vista subregion as part of the MSCP needs to be done in the EIR. There were several other comments we made in out RCC comments."

Public hearing closed 9:05.

THE EASTLAKE COMPANY, LLC

August 26, 1998

Mr. Bob Leiter, Director of Planning
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

RE: SEIR #97-04 - Eastlake Trails/Green Replanning

Dear Bob:

The EastLake Company has completed a review of the referenced document. We have prepared the attached summary of comments (dated 8/26/98) as a result of this review.

Please forward these comments to the SEIR consultant (RECON) along with a request that these issues be addressed in the final environmental document. I appreciate your assistance with this matter.

If you have any questions please do not hesitate to call me.

Sincerely,

Bruce N. Sloan
Vice President

BNS:jss

Enclosure

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900 Lane Avenue, Suite 100 • Chula Vista, California 91914 • Telephone (619) 421-0127 • Facsimile (619) 421-1830

SUMMARY COMMENTS
DRAFT SEIR FOR THE EASTLAKE TRAILS/GREENS REPLANNING PROGRAM
EIR #97-04

1. **EIR-PG 81, Traffic Report PG 80, 81**
The EIR on page 82 states the following two direct mitigation measures are required for the Year 2010 (with SR-125)

"4.2.4.10 Improve Otay Lakes Road (SR-125 to EastLake Parkway to eight lanes)"

"4.2.4.11 Improve Otay Lakes Road east of Hunte Parkway to Prime Arterial Standards."

However, the traffic report on page 80 states that the following is project mitigation:

"Provide a second eastbound left-turn lane and a second southbound right-turn lane at this intersection." In addition, the widening of Otay Lakes Road is listed on page 81 of the traffic report as a cumulative mitigation requirement. Therefore the final EIR direct mitigation should be revised as shown in the traffic analysis. **1**

2. **EIR-PG 81, Traffic report PG 78**
Regarding cumulative freeway mitigation, both the EIR and traffic report state "Continuing freeway planning efforts and deficiency planning by Caltrans and SANDAG to determine acceptable mitigation strategies for the regional system. Such improvements may require additional lanes on I-805."

As shown above, the last sentence discussed the possibility of additional lanes on I-805. Neither Caltrans or SANDAG have completed a feasibility study of widening I-805. Therefore the last sentence should be removed from both the final EIR and traffic analysis until SANDAG or Caltrans completes a feasibility study to determine potential mitigation measures. **2**

3. The traffic study supporting the EIR identifies Otay Lakes Road east of Hunte Parkway as a 6-lane roadway. The 6-lane designation was developed in response to the street segment volume to capacity ratios that were determined by the study. The predicted traffic volumes minimally demonstrate a need for a 6-lane facility. Additional intersection analysis should be performed to determine the extent to which a 6-lane facility should the included in the City's arterial roadway plan. Conditions placed on new development in the interim years (prior to reaching capacity limits) should include reservation of right-of-way and payment of fair share improvement cost through transportation improvement fee programs. **3**

4. The traffic study identified Hunte Parkway (north of Olympic Parkway) as a 6-lane roadway. Interim and buildout traffic volumes on the segment do not appear to support the 6-lane classification. The City's arterial roadway circulation plan should be modified to include a 4-lane roadway classification for Hunte Parkway from Clubhouse Drive to Olympic Parkway. **4**

1. The final SEIR has been revised to clarify these traffic mitigation measures described in the traffic technical report.

2. The final SEIR has been revised to clarify the intent of this statement regarding freeway improvements.

3. Comment noted. However, the traffic study assumed a six-lane roadway at buildout based on the Circulation Element classification for this road as a six-lane prime arterial roadway . No significant traffic impacts on this segment were identified in the SEIR. This conclusion is consistent with the revisions to the City's Circulation Element adopted concurrent with the approval of the Otay Ranch GDP.

4. Comment noted. The traffic study and final SEIR have been modified to reflect this comment. No significant traffic impacts on this segment are identified in the final SEIR.

FINAL
SUBSEQUENT ENVIRONMENTAL IMPACT REPORT
FOR THE
EASTLAKE TRAILS/GREENS REPLANNING PROGRAM

EIR #97-04

Prepared for

CITY OF CHULA VISTA
276 FOURTH AVENUE
CHULA VISTA, CA 91910

Prepared by

RECON NUMBER 2895E
NOVEMBER 4, 1998

4241 Jutland Drive, Suite 201
San Diego, CA 92117-3653
619 / 270-5066 fax 270-5414

RECON
REGIONAL ENVIRONMENTAL CONSULTANTS

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1.0 INTRODUCTION AND SUMMARY

1.1 Purpose and Scope of the SEIR

This subsequent environmental impact report (SEIR) has been prepared according to the requirements of the City of Chula Vista and the California Environmental Quality Act (CEQA) of 1970, as amended. It is an informational document intended for both the decision maker and the public and, as such, presents relevant information concerning the applicant's proposed EastLake Trails/Greens Replanning Program.

The establishment of the EastLake area as a planned community was approved by the City of Chula Vista in 1982. Since that time, the EastLake I General Development Plan (GDP) was expanded to become the EastLake II GDP, and the EastLake III GDP was adopted in 1990. All neighborhoods in EastLake II except for EastLake Trails have approved Sectional Planning Area (SPA) Plans. EastLake Trails was previously addressed in several EIRs including the original Master EIR for EastLake (EIR 81-3) and the 1989 Final EIR for EastLake Greens SPA and EastLake Trails prezone and annexation (EIR 86-4). These previous EIRs are incorporated herein by reference and are summarized as necessary within each section of this subsequent EIR. The Trails property was included in these documents for the purpose of a prezone and annexation of the property to the City; however, specific impacts for the Trails were not adequately addressed. Because of the long planning history associated with EastLake, almost all of the area that would be included in the proposed project has been subject to prior environmental review, and environmental conditions in the area are well known. Based on a review of this environmental information developed in prior review, the City of Chula Vista determined that a subsequent EIR should be prepared for the proposed project.

The proposed project also includes two non-contiguous parcels, referred to as the "Land Swap" parcels. These parcels were part of the Otay Ranch GDP and the Otay Ranch EIR, which is also incorporated herein by reference.

Several discretionary actions would be necessary for the implementation of the EastLake Trails/Greens Replanning Program. This SEIR is intended to evaluate the environmental impacts of all of these actions. The discretionary actions required include the following:

1. An amendment to the Chula Vista General Plan
2. Amendments to the EastLake II (EastLake I Expansion) General Development Plan
3. Amend the EastLake Greens SPA Plan to incorporate the "Land Swap" parcels into the SPA Plan and amendments to the associated documents, including: (a) EastLake II Planned Community District Regulations, (b) EastLake Greens Air Quality

Improvement Plan, (c) EastLake Greens Water Conservation Plan, (d) EastLake Greens Public Facilities Financing Plan, and (e) EastLake Greens Design Guidelines.

4. Adopt a new Sectional Planning Area plan for EastLake Trails, in EastLake II, and associated documents, including: (a) Planned Community District Regulations, (b) Air Quality Improvement Plan, (c) Water Conservation Plan, (d) Public Facilities Financing Plan, (e) Design Guidelines, and (f) Affordable Housing Program and Development Agreement.

The applicant for the proposed project is The EastLake Company. The City of Chula Vista is the Lead Agency under CEQA for the preparation of this SEIR, since discretionary power of approval of each component of the EastLake Trails/Greens replanning Program rests with the City.

1.2 CEQA Requirements

1.2.1 Environmental Compliance

The California Environmental Quality Act of 1970 (California Public Resources Code Section 21000 et. seq.) requires the preparation of EIRs or other environmental analysis for any project that a lead agency proposes to implement, unless it is specifically exempt by CEQA. The City of Chula Vista is the lead agency for the processing of this SEIR.

According to CEQA Section 21002.1, "The purpose of an EIR is to identify the significant effects of a project on the environment, to identify alternatives to the project and to indicate the manner in which those significant effects can be mitigated or avoided." CEQA also serves to provide mechanisms whereby the public and decision makers can be informed about the nature of the proposed project and the type and extent of the impacts the project and project alternatives would have on the environment if implemented.

This SEIR has been prepared in accordance with the requirements of the City of Chula Vista Environmental Review Procedures and complies with all criteria, standards, and procedures of CEQA and the State CEQA Guidelines (California Administrative Code, Section 15000, et. seq.).

1.2.2 Notice of Preparation

A Notice of Preparation (NOP) was prepared by the City and circulated on March 23, 1998 for a 30-day public review pursuant to CEQA. Responses to comments received during the NOP public review period are incorporated in the text of the SEIR in the appropriate locations. The NOP and response letters are included in Appendix A of this document. The following specific topics have been identified for analysis in this SEIR:

land use, visual quality/landform alteration, traffic, noise, biology, socioeconomics, public facilities, drainage, air quality, cultural resources, paleontology, and threshold analysis for the City's Growth Management Program. For each of these topics, Chapter 4 of this SEIR includes a discussion of existing conditions including previous EIR documentation, followed by a discussion of impacts, an identification of potentially significant impacts, and a recommendation of mitigation measures.

1.2.3 Environmental Review Procedure

The City of Chula Vista is the lead agency for the SEIR preparation and review process. One of the responsibilities of the lead agency is to approve, disapprove, or otherwise carry out proposed projects. Important to the environmental review and final decision-making process is public participation. The following discussion provides the mechanisms by which this SEIR may be reviewed by agencies, organizations, and the general public.

The NOP for the proposed EastLake Trails/Greens Replanning Program provided the public and agencies to comment on the scope of the SEIR. The NOP was distributed to various organizations and governmental agencies including the State Clearinghouse. Copies of the NOP and the responses are included in Appendix A of this draft SEIR.

This SEIR will be subject to review and comment by the public as well as other interested jurisdictions, agencies, and organizations. A public hearing on the SEIR will be held at the end of the 30-day local public review period by the Planning Commission to gather verbal comments on the adequacy of the SEIR.

Following public review, a final SEIR will be prepared which will address the written comments received during the public review period and oral comments received during the public hearing. The City of Chula Vista will review and consider the final EIR in making their decision to approve, revise, or deny the proposed project.

1.3 EIR Format

CEQA and the CEQA Guidelines specify the contents of any SEIR and require the SEIR to clearly identify the location of the specified contents within the SEIR. CEQA and the Guidelines do not, however, specify the format within which those items shall be included. In this SEIR, a topical organization has been followed so that most of the information related to single issue or topic is presented in the same report section. Table 1-1 lists the CEQA Guidelines references for required contents and the location of each in this SEIR. Technical studies and supporting materials and information are in the appendixes, which are bound under separate cover and are available for review at the City of Chula Vista Planning Department, 276 Fourth Avenue, Chula Vista, and the Chula Vista Public Library.

TABLE 1-1
CEQA-REQUIRED EIR CONTENTS

CEQA Guidelines Section	Topic	Location in this EIR
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15124	Project Description	Chapter 2, with further details in each topical discussion in Chapter 4 as appropriate
15125	Environmental Setting	Summarized in Chapter 3, with more detail in the "Existing Conditions" section for each topic in Chapter 4
15126	Environmental Impact	
	(a) Significant Effects	"Impacts" sections of Chapter 4
	(b) Significant Effects Which Cannot Be Avoided	"Impacts" sections of Chapter 4
	(c) Mitigation Measures	"Mitigation" sections of Chapter 4
	(d) Alternatives	Chapter 6
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1.4 Summary of Impacts and Mitigation Measures

Tables 1-2 and 1-3 provide a summary of the impacts and mitigation measures presented in the text of the SEIR.

TABLE 1-2
SIGNIFICANT IMPACTS AND PROPOSED MITIGATION

Impact	Mitigation Measures	Analysis of Significance After Mitigation
Transportation/Traffic Circulation (Direct and Cumulative)		
In the year 2000, significant cumulative impacts would occur on East H Street between I-805 and Terra Nova Drive and on Telegraph Canyon Road between I-805 and Paseo del Rey. Significant cumulative impacts will occur at the East H Street/ I-805 southbound ramps and Telegraph Canyon Road/I-805 southbound ramps intersections.	The following mitigation measures would reduce cumulative impacts for street segments and intersections for the year 2000 without SR-125: Extend Olympic Parkway eastward to Hunte Parkway. The LOS improvement at the Telegraph Canyon Road/I-805 (LOS F to LOS C) southbound ramps intersection between years 2000 and 2005 is principally due to the Olympic Parkway construction. (Mitigation Measure 4.2.4.1) Continued freeway planning efforts and deficiency planning by Caltrans and SANDAG to determine acceptable mitigation strategies for the regional freeway system. The City of Chula Vista is willing to review and consider participating in a regional deficiency plan as developed and approved by SANDAG, Caltrans, and all other local jurisdictions. (Mitigation Measure 4.2.4.2)	Less than significant.
In the year 2005, without SR-125, significant cumulative impacts are calculated to occur on East H Street between I-805 and Terra Nova Drive, on Otay Lakes Road between East H Street and Telegraph Canyon Road, and on Olympic Parkway between I-805 and Paseo Ranchero. Significant cumulative impacts will occur at the East H Street/I-805 southbound ramps and Telegraph Canyon Road/I-805 southbound ramps intersections.	The following mitigation measures would reduce cumulative impacts for street segments and intersections for the year 2005 without SR-125: Construct SR-125 as a toll road, which would mitigate the segment impact on East H Street. (Mitigation Measure 4.2.4.3) Improve Otay Lakes Road to six-lane Major street standards between East H Street and Telegraph Canyon Road if SR-125 is not constructed, is not under construction, or construction is not imminent. For purposes of this mitigation measure, "imminent" shall mean approved and funded. (Mitigation Measure 4.2.4.4) Improve Olympic Parkway between I-805 and Paseo Ranchero to Prime Arterial standards. (Mitigation Measure 4.2.4.5)	Less than significant.

TABLE 1-2
SIGNIFICANT IMPACTS AND PROPOSED MITIGATION
(continued)

Impact	Mitigation Measures	Analysis of Significance After Mitigation
Transportation/Traffic Circulation (Direct and Cumulative) (cont.)		
	Continued freeway planning efforts and deficiency planning by Caltrans and SANDAG to determine acceptable mitigation strategies for the regional freeway system. The City of Chula Vista is willing to review and consider participating in a regional deficiency plan as developed and approved by SANDAG, Caltrans, and all other local jurisdictions. (Mitigation Measure 4.2.4.6)	
In the year 2005 with SR-125, no significant direct or cumulative impacts will occur to any street segments or intersections.	The following mitigation measures would reduce cumulative impacts for freeways for the year 2005 without SR-125: Continued freeway planning efforts and deficiency planning by Caltrans and SANDAG to determine acceptable mitigation strategies for the regional freeway system. The City of Chula Vista is willing to review and consider participating in a regional deficiency plan as developed and approved by SANDAG, Caltrans, and all other local jurisdictions. (Mitigation Measure 4.2.4.7)	Less than significant.
In the year 2010, with SR-125, significant direct and cumulative impacts would occur. These impacts include the project's only direct impact at the Otay Lakes Road/Lane Avenue intersection (LOS F) and the cumulative impacts on Otay Lakes Road between SR-125 and EastLake Parkway, on Otay Lakes Road east of Hunte Parkway, on EastLake Parkway between Otay Lakes Road and Clubhouse Drive, and on Lane Avenue between Proctor Valley Road and Otay Lakes Road.	The following mitigation measures would reduce the direct and cumulative impacts for intersections, street segments, and freeways for the year 2010: The intersection of Otay Lakes Road and Lane Avenue is required to be improved prior to the issuance of the first building permit for the southern "Land Swap" parcel. Improvements include a second eastbound to northbound left-turn lane on Otay Lakes Road and a second southbound to westbound right-turn lane on Lane Avenue. (Mitigation Measure 4.2.4.8) Improve Lane Avenue between Proctor Valley Road and Otay Lakes Road to four-lane Major street standards. (Mitigation Measure 4.2.4.9)	Less than significant.

TABLE 1-2
SIGNIFICANT IMPACTS AND PROPOSED MITIGATION
(continued)

Impact	Mitigation Measures	Analysis of Significance After Mitigation
Transportation/Traffic Circulation (Direct and Cumulative) (cont.)		
	Improve Otay Lakes Road (SR-125 to EastLake Parkway) to eight lanes. (Mitigation Measure 4.2.4.10) Continued freeway planning efforts and deficiency planning by Caltrans and SANDAG to determine acceptable mitigation strategies for the regional freeway system. The City of Chula Vista is willing to review and consider participating in a regional deficiency plan as developed and approved by SANDAG, Caltrans, and all other local jurisdictions. (Mitigation Measure 4.2.4.11)	
At buildout, significant cumulative impacts are identified for Otay Lakes Road east of Hunte Parkway, on EastLake Parkway north of Otay Lakes Road to Olympic Parkway, and on Lane Avenue between Proctor Valley Road to Otay Lakes Road.	The following mitigation measures would reduce cumulative impacts for street segments under buildout conditions: Improve EastLake Parkway between Otay Lakes Road and SR-125 to six-lane Major street standards. (Mitigation Measure 4.2.4.12) Continued freeway planning by Caltrans and SANDAG to determine acceptable mitigation strategies for the regional freeway system. The City of Chula Vista is willing to review and consider participating in a regional deficiency plan as developed and approved by SANDAG, Caltrans, and all other local jurisdictions. (Mitigation Measure 4.2.4.13)	Significant, not mitigated.
Biological Resources (Direct)		
Within the EastLake Trails project area, construction and grading associated with the Salt Creek linear park and other land uses would directly impact willow wetland and non-wetland jurisdictional waters within the northern portion of	Mitigation for willow wetland and non-wetland jurisdictional waters impacts would be required by the City of Chula Vista. The proposed enhancement and creation mitigation ratio is approximately 2:1 for the impacts associated with the grading for the Salt Creek Linear Park. Approval of a mitigation	Less than significant.

TABLE 1-2
SIGNIFICANT IMPACTS AND PROPOSED MITIGATION
(continued)

Impact	Mitigation Measures	Analysis of Significance After Mitigation
Biological Resources (Direct) (cont.)		
Salt Creek wetland area and are considered a significant impact. The impacts to agricultural lands within the remainder of the EastLake Trails site and the "Land Swap" parcels are not considered a significant impact.	plan by the City of Chula Vista which would also be subject to the approval by state and federal wildlife agencies as part of the 1603 Streambed Alteration and Section 404 permitting process, would be required at the time a tentative map is processed. Mitigation for the Salt Creek wetland impacts include the following: Conditions of approval at the time a tentative map is processed for the EastLake Trails project site would require the preparation and approval of a detailed mitigation plan for the creation and enhancement of riparian vegetation within the Salt Creek Corridor. (Mitigation Measure 4.3.4.1) Prior to the issuance of a grading permit, the project applicant shall be required to obtain state (1603 Streambed Alteration Agreement) and federal (Section 404 Clean Water Act) permits. (Mitigation Measure 4.3.4.2)	
Hydrology/Drainage (Direct)		
Development of the proposed project would cause an increase in the amount of runoff and would have potentially significant impacts on downstream drainage facilities and water quality. The use of detention basins to control runoff discharge and the implementation of the following water quality mitigation measures would reduce potentially significant impacts to a level less than significant.	The following measures would reduce levels of erosion, sedimentation, and runoff during construction activities and water quality impacts. Hydroseeding and landscaping of any cut/fill slopes disturbed or built during the construction phase of this project with appropriate ground cover vegetation would be performed within 30 days of completion of grading activities. (Mitigation Measure 4.4.4.1) Areas of native vegetation or adjoining slopes to be avoided during grading activities would be delineated in the field based on adopted grading plans to minimize disturbance to existing vegetation and slopes. (Mitigation Measure 4.4.4.2)	Less than significant.

TABLE 1-2
SIGNIFICANT IMPACTS AND PROPOSED MITIGATION
(continued)

Impact	Mitigation Measures	Analysis of Significance After Mitigation
Hydrology/Drainage (Direct) (cont.)		
	Artificial ground cover, hay bales, and catch basins to retard the rate of runoff from manufactured slopes would be installed if grading occurs during wet weather season, November 1 through April 1. (Mitigation Measure 4.4.4.3)	
	Fine particulates in geologic materials used to construct the surficial layers of manufactured slopes would not be specified unless a suitable alternative is not available. (Mitigation Measure 4.4.4.4)	
	Temporary sedimentation and desilting basins between graded areas and streams would be provided during grading. (Mitigation Measure 4.4.4.5)	
	Best Management Practices appropriate to the characteristics of the project shall be employed to reduce pollutants available for transport or to reduce the amount of pollutants in runoff. (Mitigation Measures 4.4.4.6-4.4.4.11)	
Landform Alteration/Visual Quality (Direct)		
The proposed development of EastLake Trails and the "Land Swap" parcels would result in significant on-site landform and visual quality impacts. The visual character of the site would change from agricultural to planned community.	At the time tentative maps are processed for EastLake Trails and the "Land Swap" parcels, compliance with the respective SPA Plan Design Guidelines would be required as conditions of approval to ensure that significant landform alteration and visual impacts are reduced to below a level of significant. The mitigation requirements included in the design guidelines involve architectural and site design, lighting, fencing, circulation, and comprehensive grading and landscaping plans, among other techniques. Plans detailing the proposed Design Guidelines are included in the EastLake Greens and Trails SPA Plans.	Less than significant.

TABLE 1-2
SIGNIFICANT IMPACTS AND PROPOSED MITIGATION
(continued)

Impact	Mitigation Measures	Analysis of Significance After Mitigation
Noise (Direct)		
Noise impacts to the residential areas within EastLake Trails from traffic along Otay Lakes Road, Hunte Parkway, and Olympic Parkway would be significant.	Mitigation of potential first-floor exterior noise impacts to achieve the City's 65 CNEL exterior noise standard can be accomplished through the construction of barriers. The barriers should be either walls or berms—or a combination thereof—constructed of solid material with a density of at least four pounds per square foot and should not have any cracks or gaps. Examples of acceptable barrier materials include, but are not limited to, masonry block, wood frame with stucco, 0.5-inch-thick Plexiglas, or 0.25-inch-thick plate glass. If transparent barrier materials are used, no gaps should occur between the panels. Identification of appropriate noise attenuation measures to the satisfaction of the Director of Planning and Building shall be a condition of any tentative map approval. (Mitigation Measure 4.6.4.1) Prior to approval of the tentative map for EastLake Trails, verification of the above mitigation based on detailed grading plans shall be required. In addition, if the projected traffic volume on Otay Lakes Road increases or if substantial changes in the proposed project grading occur as the final design develops through the tentative map process, additional noise analysis will be required. (Mitigation Measure 4.6.4.2) Prior to the issuance of building permits, a detailed acoustical analysis shall be prepared by the applicant which demonstrates that second-floor interior noise levels due to exterior sources will be below the 45 CNEL standard. (Mitigation Measure 4.6.4.3)	Less than significant.

TABLE 1-2
SIGNIFICANT IMPACTS AND PROPOSED MITIGATION
(continued)

Impact	Mitigation Measures	Analysis of Significance After Mitigation
Noise (Direct) (cont.)		
Projected noise levels in portions of the future commercial development within the northern "Land Swap" parcel would exceed City standards and could represent a significant noise impact if sensitive receivers are placed within the noise impacts areas.	Noise levels on portions of the commercial pad are projected to exceed the City's 70 CNEL exterior noise standard. Detailed site plans or architecture plans have not been prepared as yet for the northern "Land Swap" site. Therefore, when site plans are available and prior to the issuance of building permits, an acoustical study shall be prepared. This study shall identify appropriate noise attenuation measures to the satisfaction of the Director of Planning and Building to ensure that the City's 70 CNEL standard is achieved. (Mitigation Measure 4.6.4.4)	Less than significant.
Projected noise levels in portions of the future commercial and residential pads within the southern "Land Swap" parcel would exceed City standards.	For both the commercial and residential pads, mitigation of potential first-floor exterior noise impacts can be achieved through the construction of barriers. The City's standard for commercial uses is 70 CNEL and 65 CNEL for residential uses. The barriers should be either walls or berms—or a combination thereof—constructed of solid material with a density of at least four pounds per square foot and should not have any cracks or gaps. Examples of acceptable barrier materials include, but are not limited to, masonry block, wood frame with stucco, 0.5-inch-thick Plexiglas, or 0.25-inch-thick plate glass. If transparent barrier materials are used, no gaps should occur between the panels. Identification of appropriate noise attenuation measures to the satisfaction of the Director of Planning and Building shall be a condition of any tentative map approval. (Mitigation Measure 4.6.4.5) At the time that building plans are available, and prior to the issuance of residential building permits for the southern "Land Swap" parcel, a detailed acoustical analysis shall be required which demonstrates that second-floor interior noise levels due to exterior sources will be below the 45 CNEL standard. (Mitigation Measure 4.6.4.6)	Less than significant.

TABLE 1-2
SIGNIFICANT IMPACTS AND PROPOSED MITIGATION
(continued)

Impact	Mitigation Measures	Analysis of Significance After Mitigation
Paleontology (Direct)		
Given the potential for paleontological resources on the project site, the impact to these resources would be significant.	Prior to issuance of a grading permit the applicant shall present a letter to the City of Chula Vista indicating that a qualified paleontologist has been retained to carry out the resource mitigation. A qualified paleontologist is defined as an individual with a M.S. or Ph.D. in paleontology or geology who is familiar with paleontological procedures and techniques. A paleontological monitor may be retained to perform the on-site monitoring in place of the qualified paleontologist. A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials and who is working under the supervision of a qualified paleontologist. (Mitigation Measure 4.7.4.1) The qualified paleontologist or paleontological monitor shall attend the preconstruction meeting to consult with the grading and excavation contractors. The paleontologist's duties shall include monitoring of grading, salvaging, preparation of collected materials for storage at a scientific institution that houses paleontological collections, and preparation of a monitoring results report. The details of this effort is described in the SEIR. (Mitigation Measure 4.7.4.2)	Less than significant.
Air Quality (Direct and Cumulative)		
Direct impacts would occur from grading and construction emissions. Because the SDAB is nonattainment for ozone and PM-10, the incremental increase in air pollutants generated from the project combined with air quality impacts from surrounding projects will result in a cumulatively significant impact to the air quality in the San Diego Air Basin.	Mitigation for direct air quality impacts are listed in the SEIR (Mitigation Measures 4.8.7.1-4.8.7.10). No mitigation for cumulatively significant air quality impacts is available other than compliance with the goals and objectives of the RAQS.	Significant, not mitigated.

TABLE 1-2
SIGNIFICANT IMPACTS AND PROPOSED MITIGATION
(continued)

Impact	Mitigation Measures	Analysis of Significance After Mitigation
Public Facilities		
The proposed project would result in an incremental increase in water consumption. The increase in water demand has been planned for by the OWD and as long as water facility construction coincides with the anticipated growth then no significant impacts would result with project development. However, an existing 12-inch water line crosses the EastLake Trails site to provide water supply to the Olympic Training Center. Grading operations within EastLake Trails would remove the existing 12-inch water line. This represents a potentially significant impact if the line is removed prior to the completion of the 711 Zone water transmission mains within Hunte Parkway and Olympic Parkway.	Adequate potable and recycled water storage and distribution facilities will be constructed in accordance with the Subarea Master Plan for EastLake Trails and the "Land Swap" Areas (Powell and Associates, September 1998) and to the satisfaction of the OWD. Water conservation techniques such as low-flow toilets and shower heads, drought-resistant landscaping, and recycled water for landscape irrigation will be required as conditions of approval for the tentative maps to reduce on-site domestic water consumption. 711 Zone water transmission mains within Hunte Parkway and Olympic Parkway must be operational prior to removing the 12-inch water line to assure continued water service to the Olympic Training Center. This pipeline may be abandoned upon completion of the 711 Zone pipelines within Hunte Parkway and Olympic Parkway. (Mitigation Measures 4.9.4.1-4.9.4.3)	Less than significant.
Development of the proposed project would result in an incremental increase in sewage generation and would present a significant impact due to the lack of existing transmission infrastructure. Specifically, the provision of sewer infrastructure on the southern "Land Swap" parcel may require the potential need for a trunk sewer deeper than typical city standards. The possible need for a deep facility represent a potentially significant impact. In addition, development of the "Land Swap" parcels prior to the completion of the Poggi Canyon trunk sewer would be a significant impact on the existing EastLake Parkway sewer pump station. Also, if the Salt Creek interceptor sewer is not constructed prior to the addition of approximately 1,900 EDUs in EastLake, then the Otay Lakes Road pump station would need to be expanded to handle additional flows.	Mitigation for impacts to sewer service would require the development of additional facilities which would be funded by EastLake developers and the other developments as appropriate. These sewer mitigation measures are also described in the proposed PFFPs for the EastLake Trails and EastLake Greens SPAs. The proposed PFFPs describe public facilities fees, payment schedule by the developer, and timing of sewer improvements, based on the Telegraph Canyon Sewer Basin Improvement and Financing Plan Amendment (June 1993) and the City of Chula Vista Sewage Pump Station Financing Policy (No. 570-03). The sewer infrastructure and distribution facilities improvements described in the Sewer Report for the "Land Swap" Parcels (P&D Consultants, Inc., June 1998), and The Trails Wastewater Master Plan (Dudek and Associates, August 1998) would be conditions of approval for the tentative subdivision maps or other discretionary approvals for the EastLake Trails and "Land Swap" parcels. These measures include (4.9.4.4):	Less than significant.

TABLE 1-2
SIGNIFICANT IMPACTS AND PROPOSED MITIGATION
(continued)

Impact	Mitigation Measures	Analysis of Significance After Mitigation
Public Facilities (cont.)		
	a) Prior to the issuance of a building permit for the "Land Swap" parcels, completion of the Poggi Canyon Trunk Sewer System would be required. b) Prior to the issuance of building permits beyond 1,900 EDUs within the remaining EastLake planned community developable areas (EastLake II and III), full expansion of the Otay Lakes Road pump station as described in the EastLake Trails Wastewater Master Plan (August 1998) shall be required if the Salt Creek interceptor sewer is not completed. c) The project applicant shall propose and the City must approve a sewer alternative that does not have any sewer facilities deeper than 12 feet or one where the amount of deep sewer is minimized. Three alternatives are shown for the deep sewer associated with the "Land Swap" parcels. Additional environmental review may be required depending on the sewer alternative that is selected.	
The additional elementary school students generated by the proposed project would contribute to the existing schools that are near capacity and is considered a direct significant impact.	The development of the proposed on-site elementary school (13 acres) would accomplish mitigation of the project's direct impact to schools. School facilities financing and mitigation agreements between the affected school districts and the project applicant would be required at the time the tentative map is approved by the City Council to ensure that the impacts on school facilities are mitigated to a level less than significant. These school mitigation measures are also described in the proposed PFFPs for the EastLake Trails and EastLake Greens SPAs. The proposed PFFPs describe estimated costs for the construction of school facilities identified in the SEIR. School facilities financing and mitigation agreements between the affected school districts and the project applicant shall be required prior to approval of any tentative map by the City Council. This mitigation includes the provision of 13 gross acres for a school site within the Trails for acquisition by the	Less than significant.

TABLE 1-2
SIGNIFICANT IMPACTS AND PROPOSED MITIGATION
(continued)

Impact	Mitigation Measures	Analysis of Significance After Mitigation
Public Facilities (cont.)		
	school districts. In addition, a financing agreement will be required that includes the formation of Mello-Roos Community Facilities District to ensure that development of school facilities is phased to accommodate the buildout of the project. (Mitigation Measure 4.9.4.5)	
The Chula Vista Police Department currently does not meet the standard threshold for Priority One and Priority Two calls. The incremental increase in calls for police service is considered a significant impact. Likewise, should the underpass beneath Otay Lakes Road be used as a pedestrian trail leading to the Salt Creek linear park, the potential for significant public safety impacts exist.	Development of the proposed project would result in an incremental increase in calls for police service. Police mitigation measures are described in the proposed PFFPs for the EastLake Trails and EastLake Greens SPAs. The proposed PFFPs describe public facilities fees for police services based on equivalent dwelling units by development phase. Significant impacts to police services shall be addressed on a city-wide level through the payment of public facility fees. The EastLake Trails/Greens project will be conditioned to pay public facilities fees at the rate in effect the time building permits are issued. Currently, the police department is addressing the threshold standard for deficiency by preparing a long-range strategic plan and a police facility Master Plan. The strategic plan will evaluate service levels, staff levels, methods of development, and any other factors related to service delivery. This will also include an evaluation of the established threshold which may need to be adjusted. The public facility Master Plan will address the possibility of relocating the current police facility to a more central location. (Mitigation Measure 4.9.4.7) Mitigation for the public safety impacts regarding the underpass beneath Otay Lakes Road is described below. Concurrent with the application of any TM, the applicant shall submit a plan that shows: (Mitigation Measure 4.9.4.8): a) Landscaping on and around the hiking trails should be limited to low maintenance ground cover and trees and of a height that would not obscure visibility into the greenbelt/hiking trails route. This area should be kept as open as possible to discourage loitering.	Less than significant.

TABLE 1-2
SIGNIFICANT IMPACTS AND PROPOSED MITIGATION
(continued)

Impact	Mitigation Measures	Analysis of Significance After Mitigation
Public Facilities (cont.)		
	b) Lighting with a minimum 15-foot height and of a construction that would resist tampering and damage would be required. Lighting should illuminate areas along the walkways and the surrounding recreational areas to increase the defensible space. In addition, the walkways with the surrounding lighting and landscaping would need to be of a type that would allow emergency vehicles to pass.	
	c) To promote use of the hiking trails and walkways, the subdivision design shall encourage the construction of residential communities which overlook the greenbelt recreational areas and hiking trails.	
	d) The underpass will require continuous, well maintained, damage resistant lighting throughout the entire tunnel. The wall construction shall resist and discourage graffiti, and the materials used need to include an illumination factor to enhance the security lighting.	
	e) Because the drainage tunnel already has a required use (water runoff), construction of a raised pedestrian walking path would be required leading to and through the tunnel. To separate pedestrians from the drainage ditch and prevent pedestrian injury, a railing/fencing would be installed. The design and materials used to construct this fence/railing should discourage climbing.	
	f) With improvements expected to the street above the underpass, the application of natural lighting through the median would enhance the required installed (wired) lighting.	
	g) Parking and facility closing times and use restrictions shall be posted and locked gates included. Set irrigation system timing to discourage use after hours and loitering. Installation of gates and fencing to control access to the suggested pedestrian underpass is highly recommended.	

TABLE 1-2
SIGNIFICANT IMPACTS AND PROPOSED MITIGATION
(continued)

Impact	Mitigation Measures	Analysis of Significance After Mitigation
Public Facilities (cont.)		
The Chula Vista Fire Department currently meets the standard threshold for fire protection for the EastLake II area. The fire department would be able to provide adequate service to the area in the short-term; however, the incremental increase in calls for fire service may result in a significant impact at project buildout.	Significant impacts to fire services shall be addressed on a city-wide level through the payment of public facility fees. The EastLake Trails project will be conditioned to pay public facilities fees at the rate in effect at the time building permits are issued. These fire mitigation measures are also described in the proposed PFFPs for the EastLake Trails and EastLake Greens SPAs. The proposed PFFPs describe public facilities fees for fire and emergency medical services based on equivalent dwelling units by development phase. The mitigation measures also include the adoption of the proposed, revised Fire Station Master Plan which calls for the addition of three new fire stations, including one within the Woods residential neighborhood of EastLake III, within the eastern territories and the relocation of Interim Fire Station No. 6 within the Salt Creek Ranch project. The proposed changes to the Fire Station Master Plan would allow the fire department to meet the standard thresholds for fire protection at buildout of EastLake. Prior to buildout of EastLake, the City shall adopt the revised Fire Station Master Plan to meet standard thresholds for fire protection. (Mitigation Measure 4.9.4.9)	Less than significant.

TABLE 1-3
IMPACTS CONSIDERED NOT SIGNIFICANT

Issue	Discussion
Land Use (Direct and Cumulative)	The proposed land use changes for EastLake Trails and the "Land Swap" parcels are compatible with surrounding existing and proposed land uses. The proposed EastLake Trails project and the proposed amendments to the EastLake II GDP and EastLake Greens SPA would reflect the land use goals of the Chula Vista General Plan, as amended, and the Eastern Territories Area Plan. Therefore, no significant land use impacts would occur.
Cultural Resources (Direct and Cumulative)	No significant archaeological/historical resources have been identified in the past surveys of the project site and no mitigation measures would be required.
Public Facilities–Park and Recreation (Direct and Cumulative)	The EastLake Trails SPA Plan proposes 48.4 acres for the Salt Creek Community Park and a 6.5-acre area for private neighborhood park. The proposed public park would extend the length of the Salt Creek corridor. The northern portion of the corridor would be improved with traditional active recreation facilities such as ball fields and sports courts. The southern portion would be dedicated to more passive activities consistent with the Salt Creek wetlands area. The park would be improved with trails, picnic tables, and other facilities which would contribute to the conservation and enjoyment of the natural amenities of the area. The amount of park acreage that will receive credit towards meeting the project's 3-acres-per-1,000-population requirements will need to be determined with adoption of the SPA Plan; however, the proposed plan will meet the threshold for local park acreage, and this impact is not considered significant.
Air Quality (Direct)	The proposed project is consistent with the goals and objectives of the RAQS. Therefore, implementation of the proposed project will not result in any significant direct long-term air quality impacts.

2.0 ENVIRONMENTAL SETTING

The area subject to the EastLake Trails/Greens Replanning Program is within the EastLake planned community, a large, partly developed mixed-use community on the urbanizing eastern fringe of the city of Chula Vista. It is about 7.5 miles from the Civic Center of Chula Vista and about an equal distance north of the Mexican border (Figures 2-1 and 2-2). The Upper and Lower Otay Lakes are just east of the EastLake community. West of EastLake are other developed areas of eastern Chula Vista. To the north, the land stretches toward the Sweetwater River valley and Sweetwater Reservoir, with the prominent peaks of San Miguel and Mother Miguel Mountains to the north. The Rolling Hills Ranch project, approved as Salt Creek Ranch, is located immediately adjacent to the northern boundary of EastLake. Development plans for this 1,197-acre project have been approved by the City of Chula Vista and construction of the first phase began in 1997. The 2,590-acre Rancho San Miguel project is located north of Rolling Hills Ranch and has an approved GDP and is currently processing a SPA Plan. To the south and to the southwest of Otay Lakes Road, EastLake is bordered by part of the 22,900-acre Otay Ranch property, stretching south to the Otay River valley. An aerial photograph of the project boundaries is shown in Figure 2-3. A General Development Plan was approved by Chula Vista and the County of San Diego for Otay Ranch in 1993. Development of the Otay Ranch has begun in Village 1, south of Telegraph Canyon Road and west of the intersection of Otay Lakes Road with Telegraph Canyon Road.

The EastLake planned community consists of two General Development Plan areas, EastLake II and EastLake III. EastLake II has SPAs adopted throughout and development has occurred, except for the proposed project area. None of EastLake III has adopted SPA Plans or is developed, with the exception of the Olympic Training Center on the west shore of Lower Otay Reservoir.

Terrain in the project area consists of gently rolling hills. In general, the land not developed for urbanized uses has been much disturbed by agriculture, but some small areas of native vegetation persist, especially along the Salt Creek Corridor on the eastern boundary of the Trails property. Topographically, EastLake Greens consists mainly of an irregular, north-/south-trending ridge with its highest elevations ranging from 700 to 750 feet above mean sea level (MSL). To the west, the elevation falls toward the Poggi Canyon drainage, with the lowest point at an elevation of about 550 feet above MSL in the upper end of Poggi Canyon. Poggi Canyon drains southwest to the Otay River.

On the east, the ridge in EastLake Greens descends toward Salt Creek, and EastLake Trails consists mostly of the slopes and drainage of the creek, which drains almost due south to the Otay River. The lowest elevation in the Trails is at Salt Creek on the southern border, at about 480 feet above MSL. A ridge running north and south in EastLake III lies between EastLake Trails and the Lower Otay Reservoir.

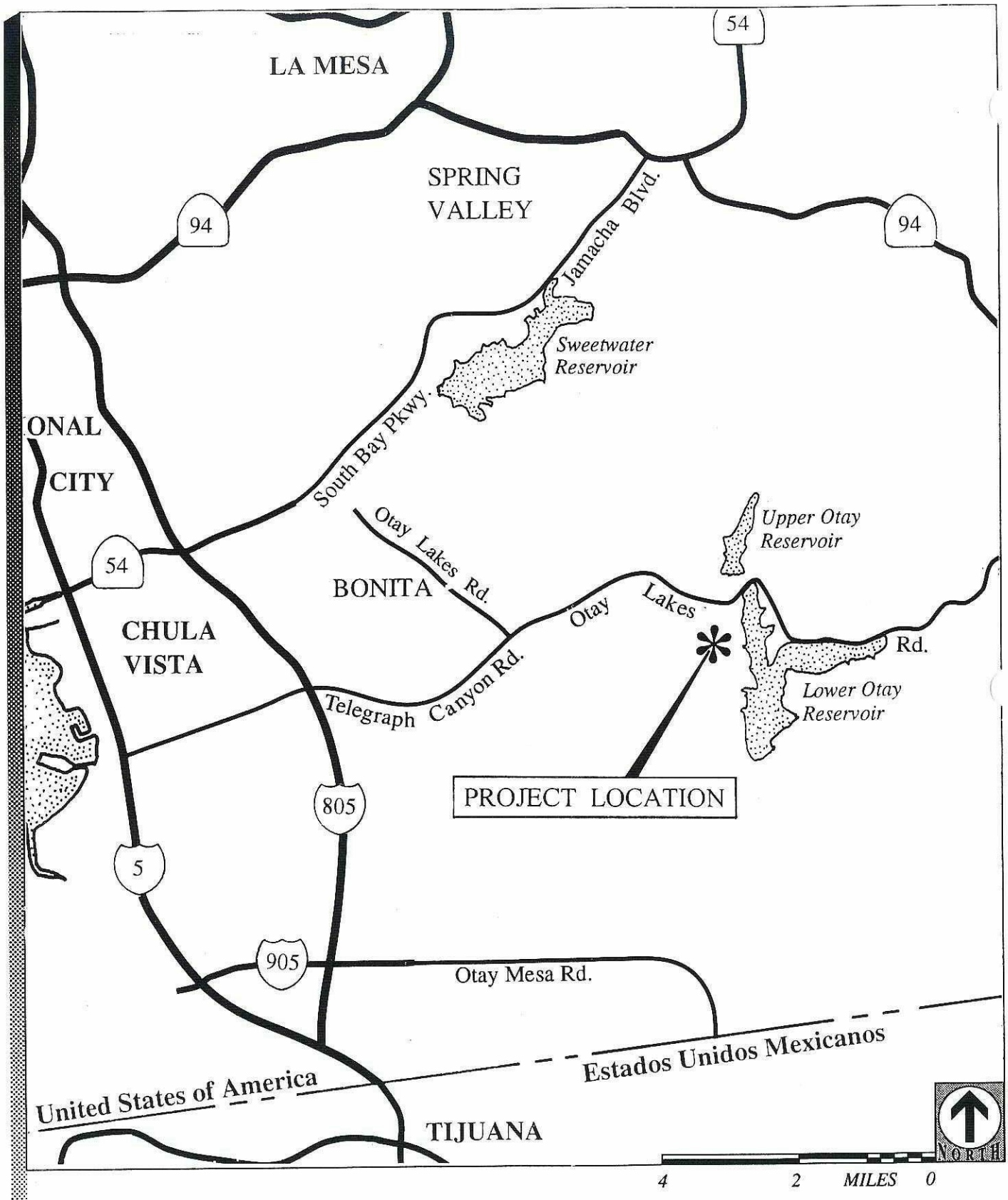
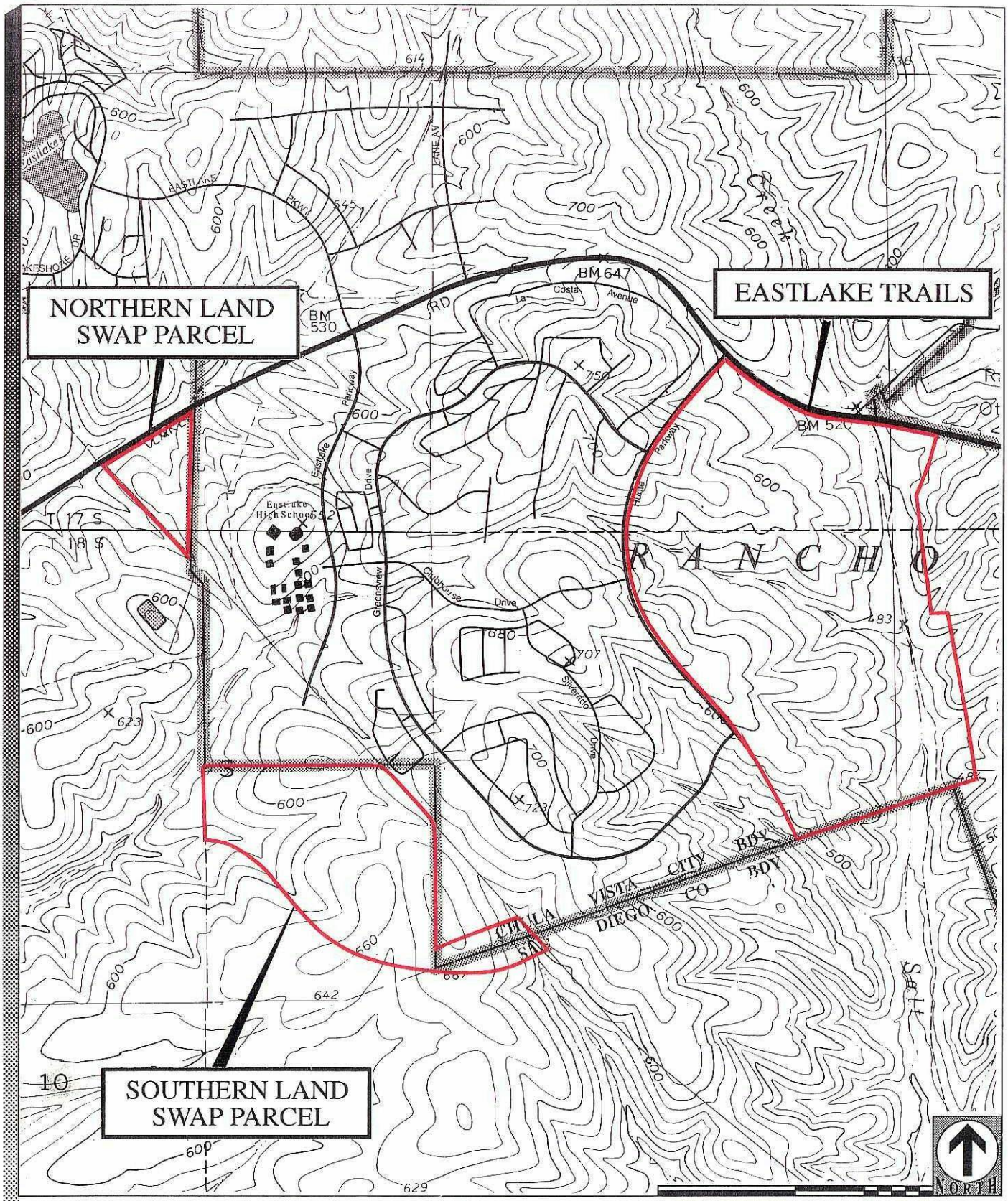


FIGURE 2-1

Regional Location of the Project



Map Source: San Diego County 2000' Scale Regional Base Map Series, Jamul quadranagle (modified)

FIGURE 2-2

Location and Topography of Project Site

FIGURE 2-3

Aerial Photograph of the Project Site and Vicinity

East of EastLake is largely vacant land in the unincorporated area of San Diego County. Development is sparse in that area, but a portion of the GDP area for Otay Ranch lies east of Otay Lakes. In general, the land rises and becomes more rugged east and northeast of the Otay Lakes.

Principal access to the EastLake Greens and Trails area is from Telegraph Canyon Road, which becomes Otay Lakes Road east of its intersection with the northerly segment of Otay Lakes Road. In EastLake and areas farther west, north-south connectors also provide access to East H Street, but the nearest major link to the regional transportation system from either Telegraph Canyon Road or East H Street is at Interstate 805, about five miles to the west. Caltrans is presently reviewing plans to build State Route 125 (SR-125) as a toll throughway from near the Otay Mesa border crossing to connect with SR-54 near Sweetwater Reservoir. Right-of-way for SR-125 has been reserved along the western border of EastLake Greens and farther north through EastLake.

3.0 PROJECT DESCRIPTION

The overall purpose of the proposed planning program is to replan the land use distribution and adopt a new SPA plan with associated regulatory documents for the EastLake Trails neighborhood and incorporate two of the three "Land Swap" parcels, referred to as the northern and southern "Land Swap" parcels (141.7 acres) into the EastLake II GDP, EastLake Greens SPA, and other associated documents.

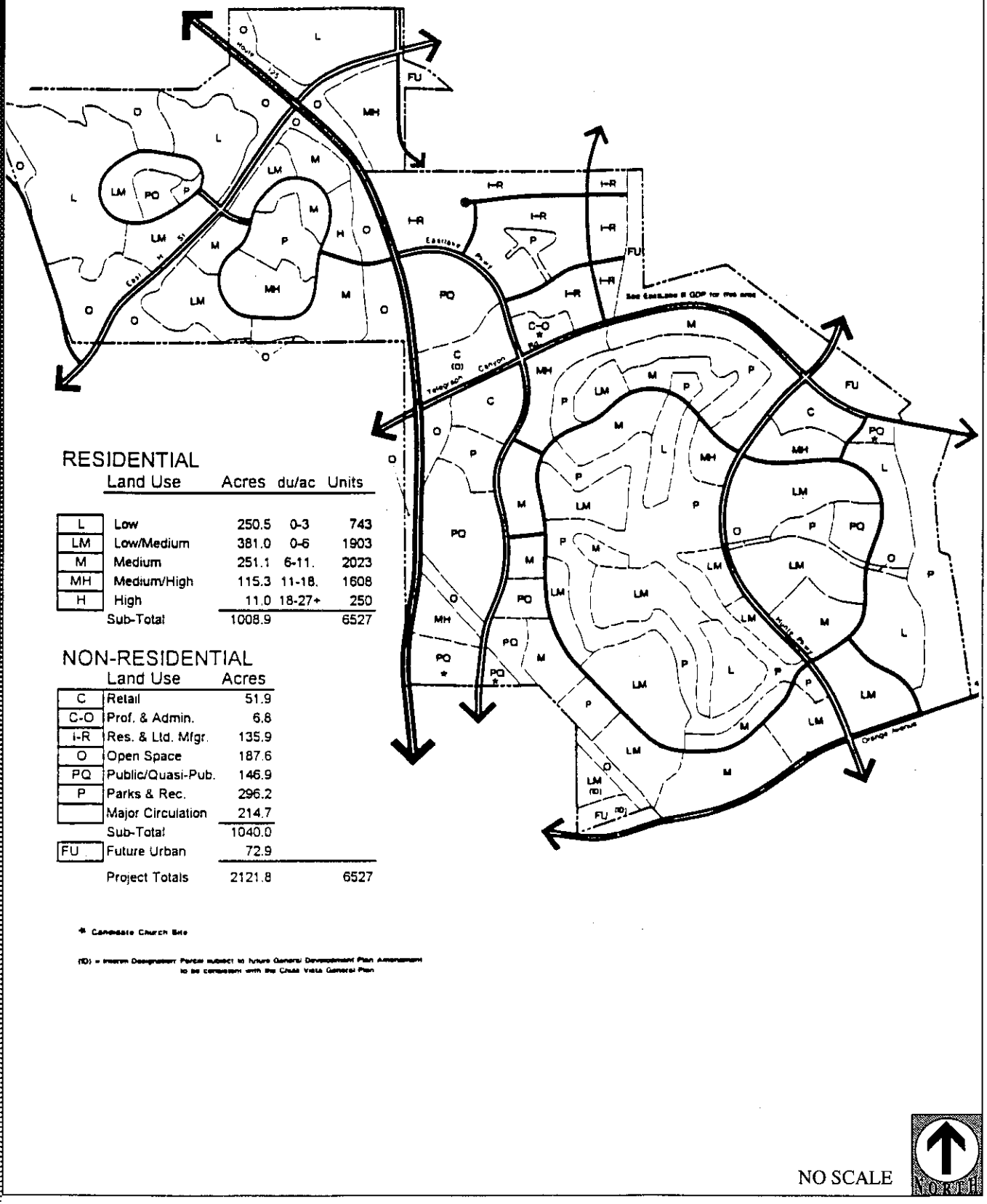
Specifically, the proposed project involves two neighborhoods known as EastLake Greens and EastLake Trails, both located within the EastLake II GDP area. The EastLake Greens neighborhood, which has an adopted SPA and is developed, consists of 853.2 acres and contains a wide range of residential densities and other support services. The EastLake Trails neighborhood, which does not have an adopted SPA and is currently vacant, consists of 322.2 acres and under the adopted EastLake II GDP this area contains residential land use designations for the most part with the exception of a 15-acre commercial site.

In 1992, The EastLake and Baldwin Companies completed a land exchange involving three parcels of land which are commonly known as the "Land Swap" parcels. The "Land Swap" parcels originally consisted of 157 acres. A total of 15.3 acres of the 157 acres was added to several EastLake Greens parcels (R-10, R-12, R-20, P-3), and Olympic Parkway right-of-way. This acreage is already included in the currently adopted EastLake Greens SPA. The remaining balance of 141.7 acres would be added to the Greens SPA with the proposed amendment. The amendments to the EastLake II GDP and the SPA Plans for the Trails and Creeks are described in detail below.

EastLake II GDP

The adopted GDP for EastLake II is shown in Figure 3-1, and the proposed GDP is shown in Figure 3-2. In addition, a comparison of the land use designations for the adopted and proposed GDPs is presented in Table 3-1. As noted in Table 3-1, the addition of the two "Land Swap" parcels increases the total area of the EastLake II GDP by 141.7 acres, and the number of residential dwelling units by 705. Overall residential density for the GDP will increase slightly from 3.1 dwelling units per acre (du/ac) to 3.2 du/ac.

The most prominent changes are (a) the addition of 24.7 acres of Professional and Administrative commercial in the northern "Land Swap" parcel; (b) in the southerly "Land Swap" parcel, 50 acres of Freeway Commercial will be added in addition to 50.2 acres of Medium Density residential. The added residential acreage combined with existing parcels R-9 (8.5 acres with 45 dwelling units) and Future Urban (6.3 acres), located immediately adjacent to the east, produce a 65-acre residential parcel with capacity for 750 dwelling units. Thus, the net increase as a result of the "Land Swap"



RESIDENTIAL

	Land Use	Acres	du/ac	Units
L	Low	250.5	0-3	743
LM	Low/Medium	381.0	0-6	1903
M	Medium	251.1	6-11.	2023
MH	Medium/High	115.3	11-18.	1608
H	High	11.0	18-27+	250
	Sub-Total	1008.9		6527

NON-RESIDENTIAL

	Land Use	Acres
C	Retail	51.9
C-O	Prof. & Admin.	6.8
I-R	Res. & Ltd. Mfgr.	135.9
O	Open Space	187.6
PQ	Public/Quasi-Pub.	146.9
P	Parks & Rec.	296.2
	Major Circulation	214.7
	Sub-Total	1040.0
FU	Future Urban	72.9
	Project Totals	2121.8

6527

* Candidate Church Site

(ID) = Interim Designation Parcels subject to future General Development Plan Amendment to be consistent with the Chula Vista General Plan

NO SCALE

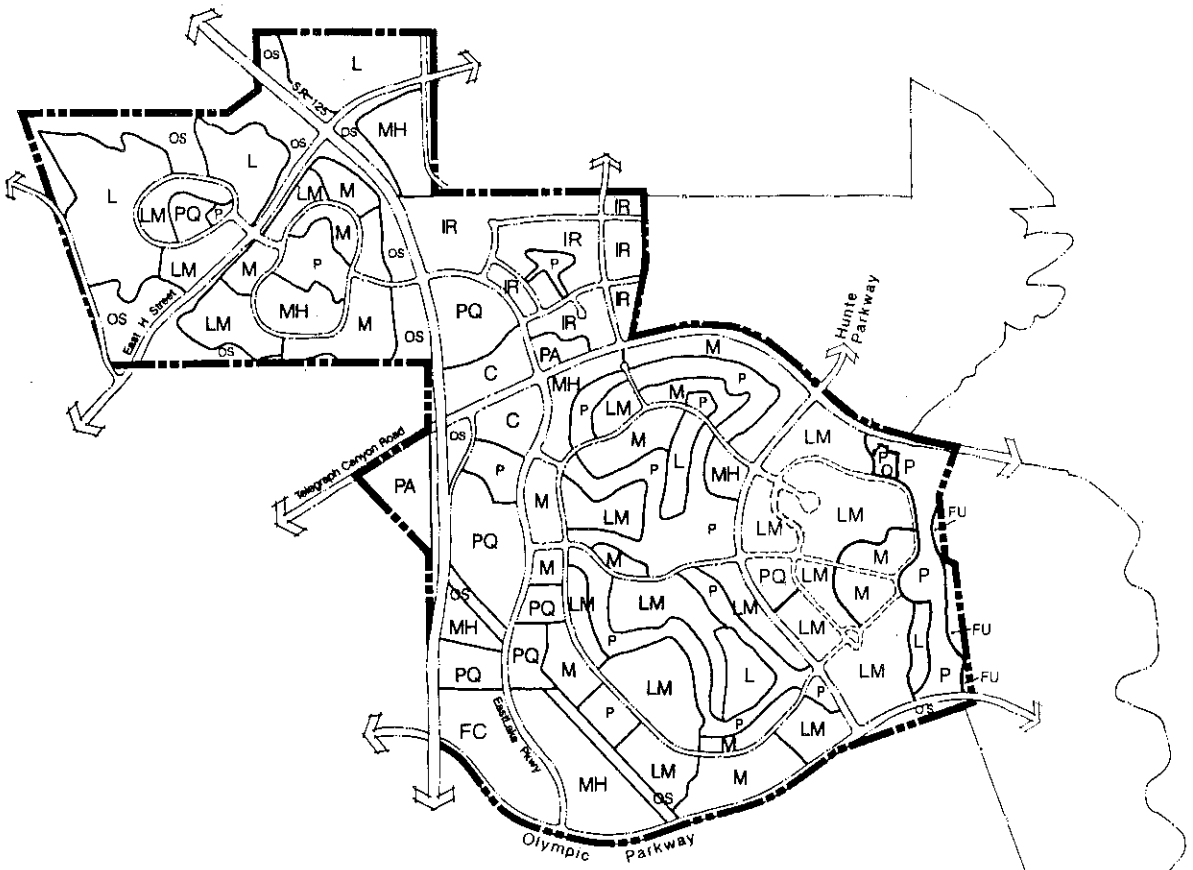
NORTH

Source: Cinti Land Planning 1997

FIGURE 3-1

EastLake II Adopted General Development Plan

RECON



LAND USE		Gross Acres	DU/AC	DU
RESIDENTIAL				
L	Low (0-3 du/ac)	208.5	2.9	614
LM	Low-Med. (3-6 du/ac)	427.9	4.7	2001
M	Medium (6-11 du/ac)	253.8	8.3	2113
MH	Med.-High (11-18 du/ac)	152.3	13.9	2114
H	High (18-27+ du/ac)	10.3	24.3	250
Sub-total Residential		1052.8	6.7	7092
NON-RESIDENTIAL				
C	Retail Commercial	36.9		
FC	Freeway Comm.	50.7		
PA	Professional & Admin.	30.7		
IR	Res. & Ltd. Manufacturing	127.8		
OS	Open Space	230.3		
PQ	Public/Quasi-Public*	147.4		
P	Parks & Recreation	285.6		
	Major Circulation	214.0		
FU	Future Urban	7.9		
Sub-total Non-Residential		1131.3		
PROJECT TOTAL		2184.1	3.2	7092

NO SCALE NORTH

Source: Cinti Land Planning 1998

FIGURE 3-2
EastLake II
Proposed General Development Plan

RECON

TABLE 3-1
EASTLAKE II GDP COMPARISON

Land Use	Adopted			Proposed		
	Gross Acres	DU	Average DU/Acre	Gross Acres	DU	Average DU/Acre
Residential						
Low Density (0-3 DU/Acre) (L)	250.5	743	3.0	217.2	640	2.9
Low-Medium Density (3-6 DU/Acre) (LM)	381.0	1,903	5.0	547.3	2,008	3.7
Medium Density (6-11 DU/Acre) (M)	251.1	2,023	8.1	180.3	2,080	11.5
Medium-High Density (11-18 DU/Acre (MH)	115.3	1,608	13.9	137.0	2,114	15.4
High Density (18-27+ DU/Acre) (H)	11.0	250	22.7	11.0	250	22.7
Residential Subtotal	1,008.9	6,527	6.5	1,092.8	7,092	6.5
Nonresidential						
Retail Commercial (C)	51.9			36.9		
Freeway Commercial (TC)	0.0			50.7		
Professional and Administrative (PA)	6.8			31.5		
Residential and Limited Manufacturing (IR)	135.9			135.9		
Open Space (OS)	187.6			188.3		
Public and Quasi-Public (PQ)	146.9			143.4		
Parks and Recreation (P)	296.2			288.0		
Major Circulation	214.7			214.0		
Future Urban (FU)	72.9			7.9		
Nonresidential Subtotal	1,112.9			1,096.6		
GENERAL DEVELOPMENT PLAN TOTAL	2,121.8	6,527	3.1	2,189.4	7,092	3.2

DU = dwelling unit

parcel annexation is 141.7 acres and 705 dwelling units. It should be noted that the total added acreage includes 16.1 acres in circulation, easements, and open space.

Other changes include the conversion of 15 acres of commercial designation to low medium density residential; deletion of approximately 65 acres of Future Urban land resulting from the proposed GDP boundary adjustment, and minor changes to the Parks and Open Space acreage.

EastLake Greens SPA

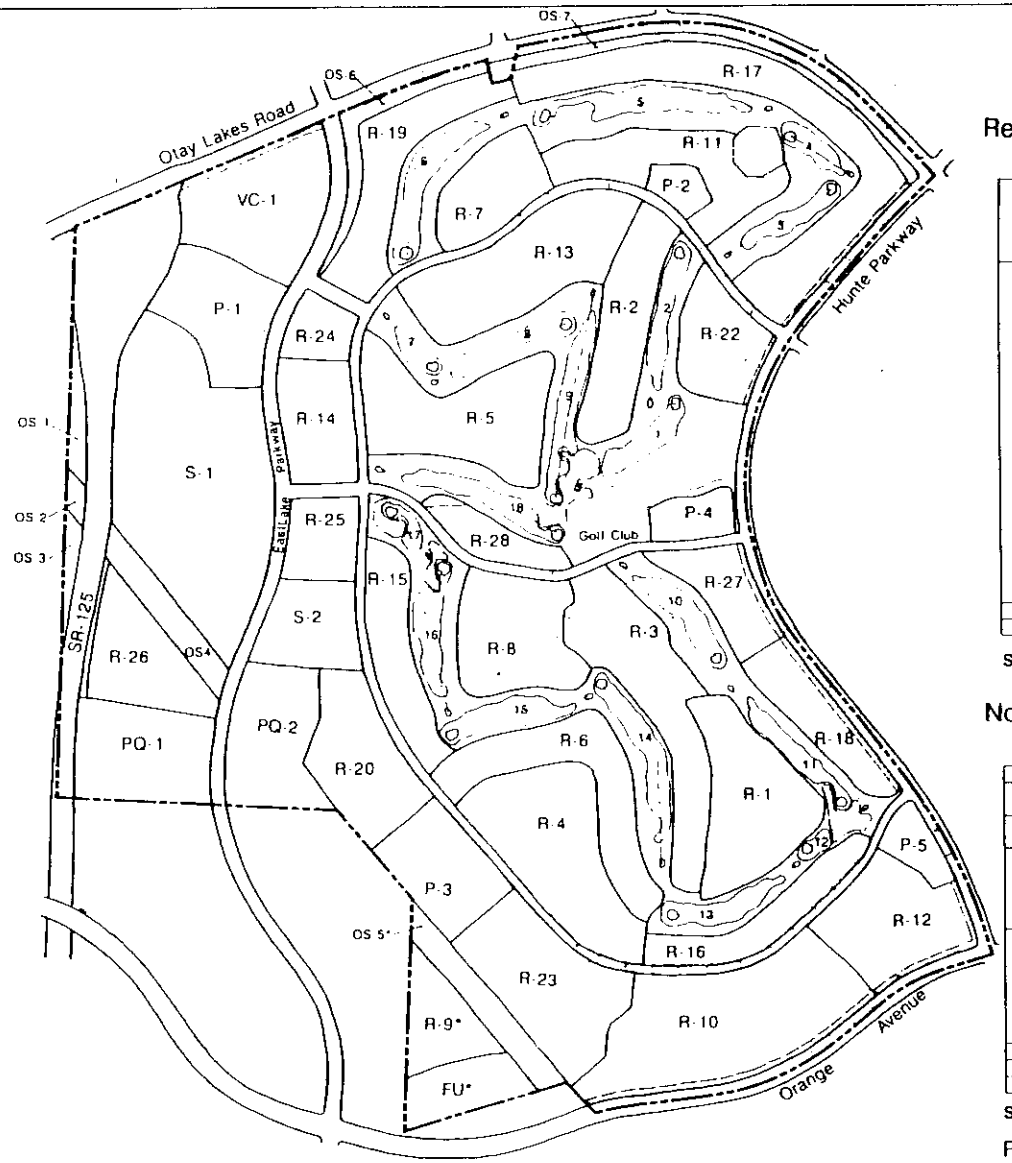
The adopted EastLake Greens SPA Plan is shown in Figure 3-3, and the proposed EastLake Greens SPA Plan is shown in Figure 3-4. Changes in land use designations are restricted to the "Land Swap" parcels and the southwest corner of the adopted SPA Plan adjacent to the southern "Land Swap" parcel. This southwestern corner is undeveloped and is separated from the part of EastLake Greens where development has begun or is completed by the route of the Second San Diego Aqueduct, marked by an Open Space designation in both the adopted and proposed SPA Plans. In that area, the proposed project would remove the "Future Urban" designation and expand the "R-9" designation from 8.5 to 65 acres. The SPA target density for the R-9 designation is proposed for an increase from 5.3 du/ac to 11.5 du/ac, yielding 750 du total on this parcel. Since the adopted SPA allowed 45 dwelling units on this parcel, the net increase would be 705 units and the total for the EastLake Greens SPA would increase from 2,738 to 3,443.

Nonresidential use changes between the adopted and proposed EastLake Greens SPA Plan would include the conversion of "Future Urban" land use category, the addition of a "Freeway Commercial" designation (50.7 acres) in the western part of the southern "Land Swap" parcel, and the addition of 24.7 acres of "Professional and Administrative" designation for the northern "Land Swap" parcel. The area of the "Major Circulation" category would increase by 17.9 acres, and the OS-5 "Open Space" category would be reduced by 1.8 acres.

EastLake Trails SPA

The proposed EastLake Trails SPA Plan is shown in Figure 3-5 and the associated land use designations are shown in Table 3-2. No SPA Plan has been adopted for this neighborhood, but the proposed SPA Plan differs in some respects from the general land uses for the Trails in the adopted EastLake II GDP. These changes consist of:

- Deletion of 65 acres as a result of relocation of the EastLake II boundaries.
- Reconfiguration of the internal circulation system



Residential

Parcel Number	Detached (D) Attached (A) **	Density Range	Acres	Target Density	Target Units
R-1	D	0-5	19.7	2.7	54
R-2	D	0-5	14.7	2.7	40
R-3	D	0-5	21.8	4.5	99
R-4	D	0-5	24.0	4.8	114
R-5	D	0-5	23.0	4.6	105
R-6	D	5-15	17.4	4.4	76
R-7	D	5-15	10.7	5.6	60
R-8	D	5-15	17.5	5.5	96
R-9*	D	5-15	8.5	5.3	45
R-10	D	5-15	34.6	7.1	246
R-11	D	5-15	14.6	6.6	87
R-12	D	5-15	18.2	5.1	92
R-13	D	5-15	22.6	6.3	142
R-14	D	5-15	11.4	7.5	86
R-15	D	5-15	11.9	5.4	64
R-16	A/D	5-15	10.9	10.0	109
R-17	A/D	5-15	28.6	7.5	214
R-18	A/D	5-15	9.9	5.5	54
R-19	A/D	5-15	14.4	11.0	158
R-20	A/D	5-15	14.3	7.6	109
R-21					
R-22	A/D	5-15	11.7	11.9	139
R-23	A/D	5-15	20.3	3.5	72
R-24	A/D	5-15	5.1	9.4	48
R-25	A/D	5-15	7.9	9.9	78
R-26	A/D	15-25	15.3	17.0	260
R-27	D	0-5	9.2	4.3	40
R-28	A/D	5-15	6.1	8.4	51
Sub-total			424.3 ac	6.8 du/ac	2738 du

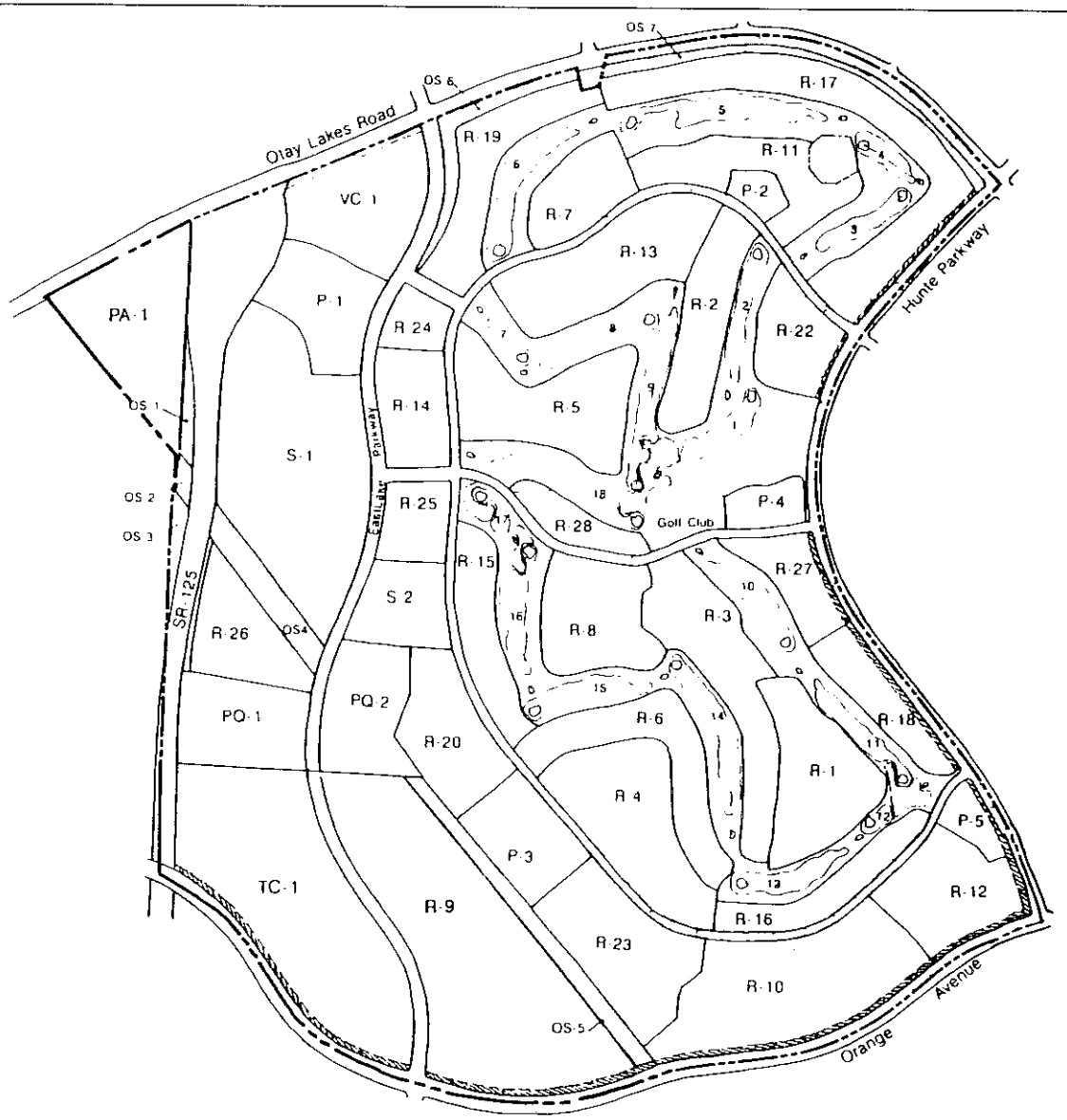
Non-Residential

Parcel Number	Land Use	Acres
VC-1	Village Center	19.6
PQ-1	Public/Quasi-Public	10.3
PQ-2	Public/Quasi-Public	15.8
S-1	High School	49.2
S-2	Elementary School	10.0
P-1	Community Park	15.1
P-2	Neighborhood Park	3.0
P-3	Neighborhood Park	11.8
P-4	Neighborhood Park	4.5
P-5	Neighborhood Park	3.0
OS-1	Open Space	2.9
OS-2	Open Space	1.1
OS-3	Open Space	1.9
OS-4	Open Space	7.8
OS-5*	Open Space	8.3
OS-6	Open Space	4.9
OS-7	Open Space	5.9
	Golf Course	160.4
	Major Circulation	87.1
FU*	Future Urban	6.3
Sub-Total		428.9 ac
Project Total		853.2 ac 3.2 du/ac 2738 du

NORTH

Source: Cinti Land Planning 1997

FIGURE 3-3
Adopted Eastlake Greens SPA Plan



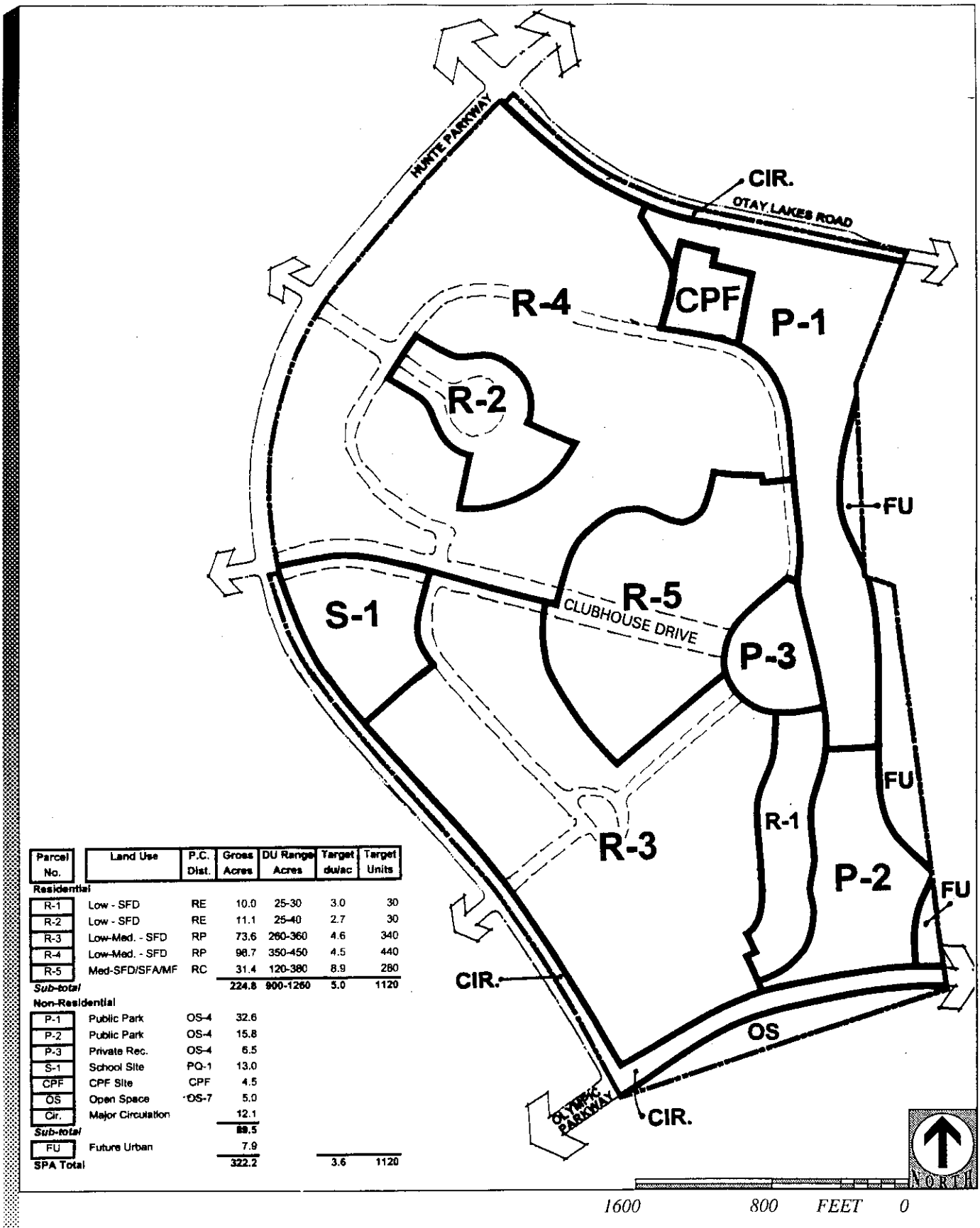
Parcel No.	Attached (A)* Detached (D)*	Density Range	Acres	Target Density	Target Units
RESIDENTIAL					
R-1	D	0-5	19 7	2 7	54
R-2	D	0-5	14 7	2 7	40
R-3	D	0-5	21 8	4 5	99
R-4	D	0-5	24 0	4 8	114
R-5	D	0-5	23 0	4 6	105
R-6	D	5-15	17 4	4 4	78
R-7	D	5-15	10 7	5 6	60
R-8	D	5-15	17 5	5 5	96
R-9	A/D	10-25	65 0	11 5	750
R-10	D	5-15	34 6	7 1	246
R-11	D	5-15	14 6	6 0	87
R-12	D	5-15	18 2	5 1	92
R-13	D	5-15	22 6	6 3	142
R-14	D	5-15	11 4	7 5	86
R-15	D	5-15	11 9	5 4	64
R-16	A/D	5-15	10 9	10 0	109
R-17	A/D	5-15	28 6	7 5	214
R-18	A/D	5-15	9 9	5 5	54
R-19	A/D	5-15	14 4	11 0	158
R-20	A/D	5-15	14 3	7 6	109
R-22	A/D	5-15	11 7	11 9	139
R-23	A/D	5-15	20 3	3 5	72
R-24	A/D	5-15	5 1	9 4	48
R-25	A/D	5-15	7 9	9 8	78
R-26	A/D	15-25	15 3	17 0	260
R-27	D	0-5	9 2	4 3	40
R-28	A/D	5-15	6 1	8 4	51
Sub-total Residential			480 8	7 2	3443

NON-RESIDENTIAL		
VC-1	Village Center	19 6
TC-1	Thoroughfare Comm.	50 7
PA-1	Prof & Admin.	24 7
PQ-1	Public/Quasi-Public	10 3
PQ-2	Public/Quasi-Public	15 8
S-1	High School	49 2
S-2	Elementary School	10 0
P-1	Community Park	15 1
P-2	Neighborhood Park	3 0
P-3	Neighborhood Park	11 8
P-4	Neighborhood Park	4 5
P-5	Neighborhood Park	3 0
OS-1	Open Space	2 9
OS-2	Open Space	1 1
OS-3	Open Space	1 9
OS-4	Open Space	7 8
OS-5	Open Space	6 5
OS-6	Open Space	4 9
OS-7	Open Space	5 9
	Golf Course	160 4
	Major Circulation	105 0
Sub-total Non-Residential		514 1
PROJECT TOTAL		994 9

NORTH

Source: Cinti Land Planning 1997

FIGURE 3-4
Proposed Eastlake Greens SPA Plan



Parcel No.	Land Use	P.C. Dist.	Gross Acres	DU Range Acres	Target du/ac	Target Units
Residential						
R-1	Low - SFD	RE	10.0	25-30	3.0	30
R-2	Low - SFD	RE	11.1	25-40	2.7	30
R-3	Low-Med. - SFD	RP	73.6	260-360	4.6	340
R-4	Low-Med. - SFD	RP	98.7	350-450	4.5	440
R-5	Med-SFD/SFA/MF	RC	31.4	120-380	8.9	280
Sub-total			224.8	900-1260	5.0	1120
Non-Residential						
P-1	Public Park	OS-4	32.6			
P-2	Public Park	OS-4	15.8			
P-3	Private Rec.	OS-4	6.5			
S-1	School Site	PQ-1	13.0			
CPF	CPF Site	CPF	4.5			
OS	Open Space	OS-7	5.0			
Cir.	Major Circulation		12.1			
Sub-total			89.5			
FU	Future Urban		7.9			
SPA Total			322.2		3.6	1120

Source: Cinti Land Planning 1998

FIGURE 3-5
Site Utilization Plan

TABLE 3-2
PROPOSED EASTLAKE TRAILS SPA PLAN

Parcel	Land Use Designation	Gross Acres	DU Range Acres	Target Density (du/ac)	Target Units
Residential					
R-1	Low, Single-Family Detached (L)	10.0	25-30	3.0	30
R-2	Low, Single-Family Detached (L)	11.1	25-40	2.7	30
R-3	Low-Medium, Single-Family Detached (LM)	73.6	260-360	4.6	340
R-4	Low-Medium, Single-Family Detached (LM)	96.7	350-450	4.5	440
R-5	Medium, Single-Family Detached/Single-Family Attached/ Multi-Family (M)	31.4	120-380	8.9	280
	Subtotal, Residential	224.8	900-1260	5.0	1,120*
Nonresidential					
P-1	Public Park	32.6			
P-2	Public Park/Open Space	15.8			
P-3	Private Recreation	6.5			
S-1	School Site	13.0			50†
CP-F	Community Purpose Facility	4.5			
OS	Open Space	5.0			
Cir.	Major Circulation	12.1			
	Subtotal, Nonresidential	89.5			
	Subtotal, Residential and Nonresidential	314.3		3.6	1,170†
FU	Future Urban	7.9			
SPA Total		322.2		3.6	1,170†

*Maximum number of units permitted if S-1 is used as a school site.

†Units permitted if S-1 is used as a residential alternative.

- Converting "Retail" (C) "Commercial" designation in the northwest corner of the SPA to Residential;

- Converting two areas designated for "Public and Quasi-Public" use (PQ) in the northern and central parts of the SPA to residential;

- Designating a 13-acre (approximately 10 acres net) elementary school site in the west-central part of the SPA;

- Designating the public park area in the Salt Creek drainage (P-1 and P-2) (a park concept plan is included as Figure 3-6), eliminating the central parks and recreation site presently shown in the central part of the SPA, adding a private recreation site (P-3) adjacent to the community park; and

- Creating a "Future Urban" (FU-1) designation to small elongated areas along the east side of Salt Creek, with further planning of these areas to occur concurrent with similar-level planning for the adjoining EastLake Vistas neighborhood in the EastLake III GDP.

- Designating 4.5 acres of community purpose facility (CPF) land use district.

Discretionary Actions

In order to complete this replanning process, the following discretionary approvals from the City of Chula Vista are being sought by the project applicant. Figure 3-7 shows the components of the 1998 Amendment areas:

1. An amendment to the Chula Vista General Plan
2. Amendments to the EastLake II General Development Plan
3. Amendment the EastLake Greens SPA Plan to incorporate the "Land Swap" parcels into the SPA Plan and amendment to the associated documents, including: (a) EastLake II Planned Community District Regulations, (b) EastLake Greens Air Quality Improvement Plan, (c) EastLake Greens Water Conservation Plan, (d) EastLake Greens Public Facilities Financing Plan, and (e) EastLake Greens Design Guidelines.
4. New Sectional Planning Area plan and associated documents, including: (a) Planned Community District Regulations, (b) Air Quality Improvement Plan, (c) Water Conservation Plan, (d) Public Facilities Financing Plan, (e) Design Guidelines, (f) Affordable Housing Program and changes, if any, in the circulation system.
5. Development Agreement between the City of Chula Vista and The EastLake Company.

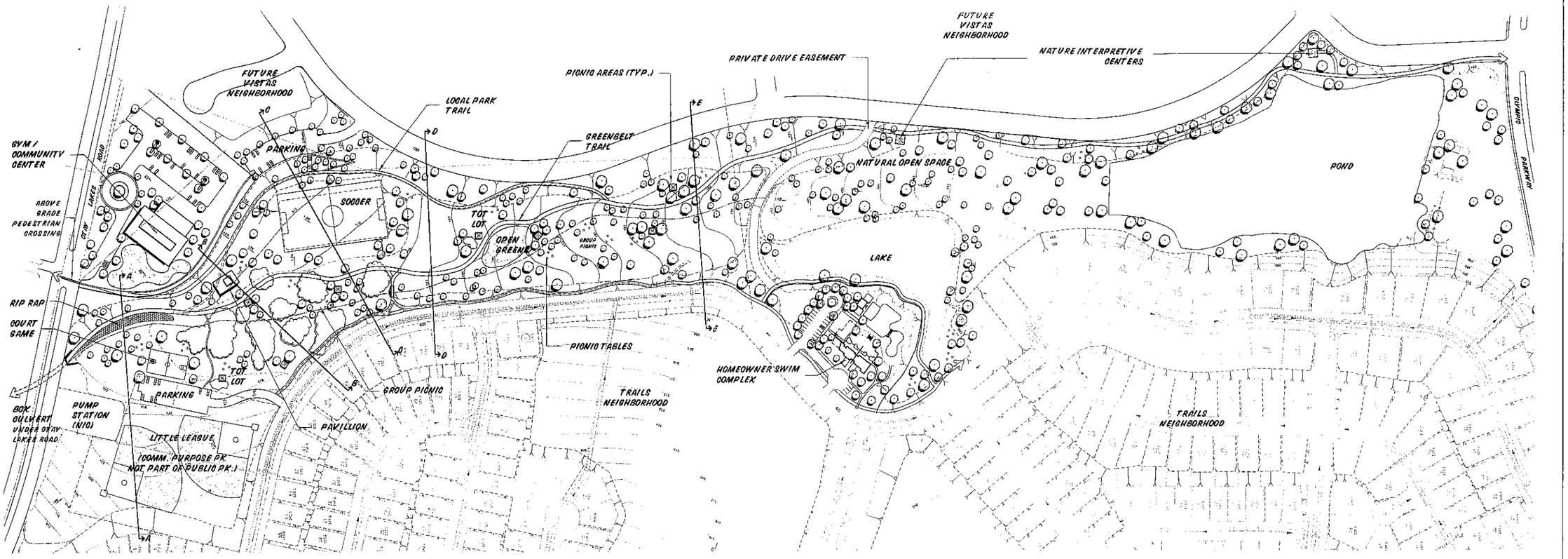
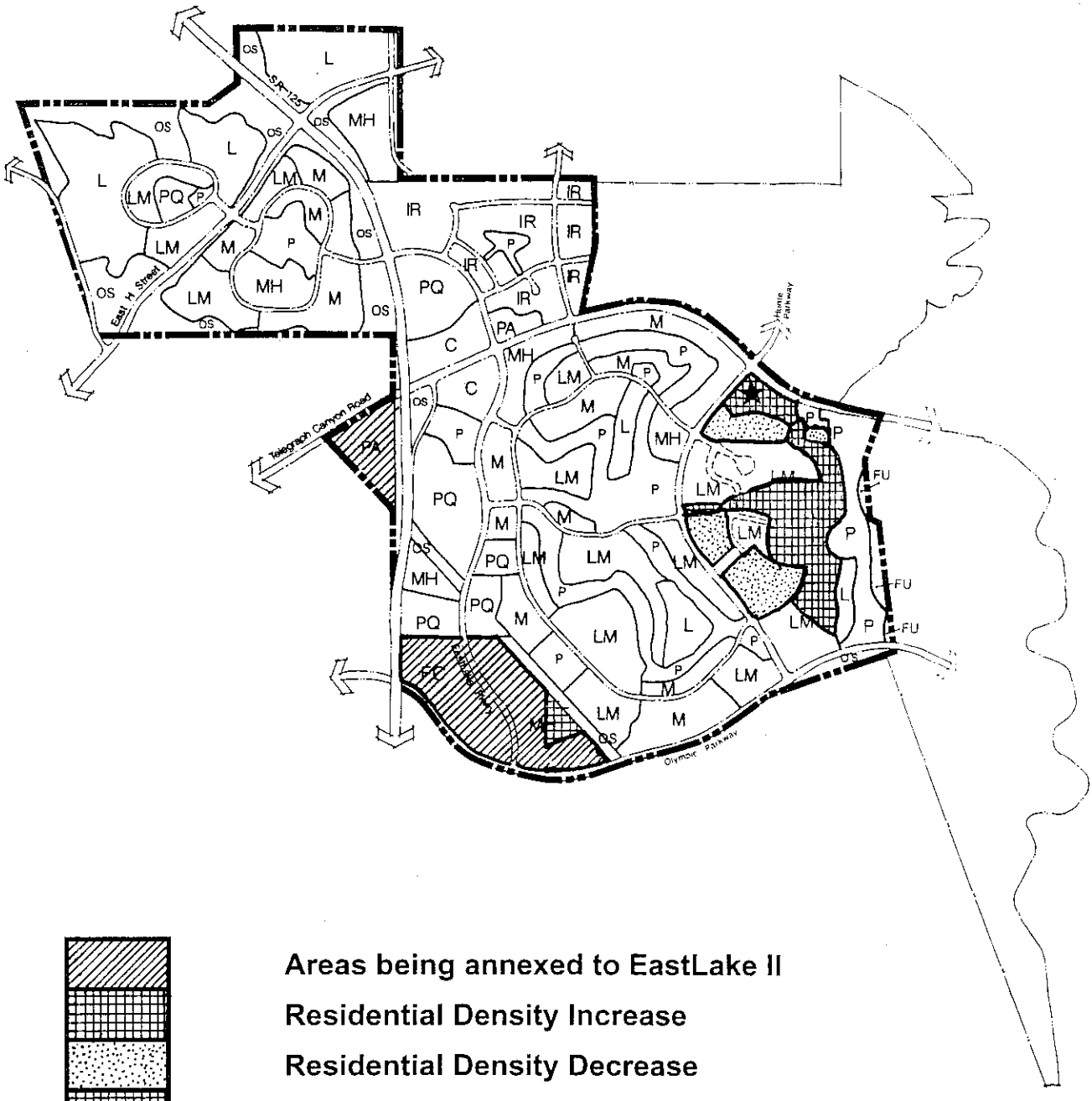


FIGURE 3-6

Proposed Community Park Concept Plan, Salt Creek Corridor



Source: Cinti Land Planning 1998

FIGURE 3-7
Proposed 1998 Amendment Areas

The requested General Plan amendments include a modification to the Land Use element and plan to delete the commercial designation and relocate a school site in the Trails neighborhood; and modify the Circulation element to reflect changes, if any, in the circulation system.

The approval of the actions sought by the applicant at the present time would result in adoption of amendments to the EastLake II GDP and EastLake Greens SPA, including the "Land Swap" parcels, and a new SPA for EastLake Trails. Implementation of the plans would require subsequent approval of tentative maps (TMs) for all of EastLake Trails and for the areas of EastLake Greens for which no TMs have yet been approved, the "Land Swap" parcels and the area on the southwest corner of the adopted GDP and of the Second San Diego Aqueduct.

The City of Chula Vista is the Lead Agency and has discretionary power of approval for all the actions sought by the applicant for the proposed project. This SEIR is intended to satisfy CEQA requirements for environmental review of those actions. Future discretionary approvals from the California Department of Fish and Game (1603 Streambed Alteration Agreement) and U.S. Army Corps of Engineers (404 Permit) may be required. No other actions by other agencies or jurisdictions have been identified that would be required to accomplish the project as proposed.

Project Goals and Objectives

The overall goal of the proposed EastLake Trails/Greens replanning program is to refine the land use plan, circulation plan, and open space design in a manner that is generally consistent with the adopted EastLake II General Development Plan and other associated documents. In addition, the specific objectives of the proposed project include the following:

- Establishment of a land use plan that provides housing and employment opportunities for residents while maintaining an acceptable quality-of-life standard within the EastLake community.

- Control and management of regional growth establishing a phased approach to development and a Public Facilities Financing Plan which ensures that necessary public facilities are in place at the time of need, providing for the siting and financing of such facilities.

- Assurance that the replanning process complies with all City and regional policies, regulations, and programs.

4.0 ENVIRONMENTAL ANALYSIS

4.1 Land Use

4.1.1 Existing Conditions

This section addresses the relationship of the proposed land use changes with the adopted EastLake plans and policies. Also, the potential for significant land use planning impacts associated with the proposed changes are assessed.

On-site and Surrounding Land Use Characteristics

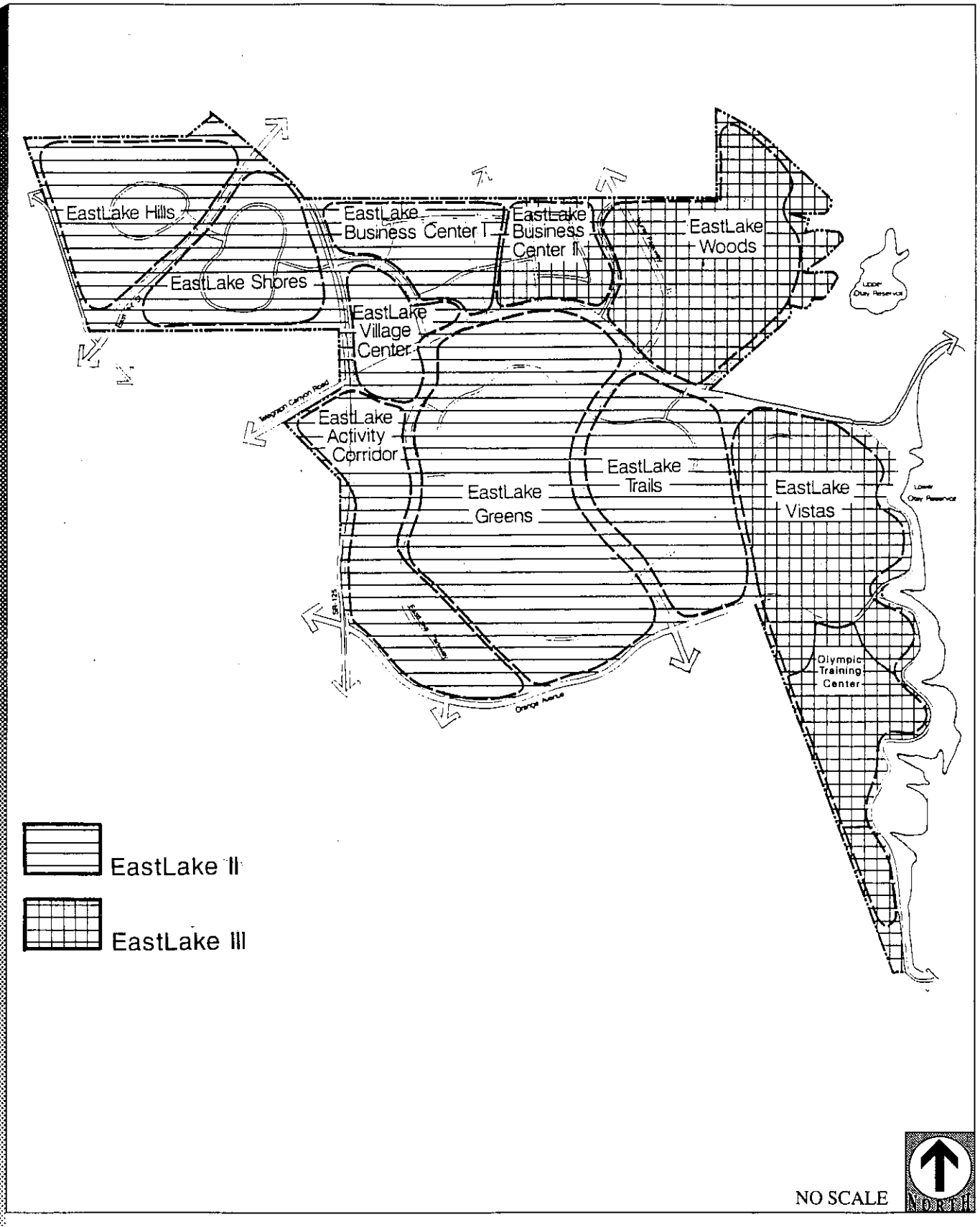
EastLake Trails

The EastLake Trails project involves 322.2 acres of land located in the eastern portion of the Chula Vista city limits, approximately 7.5 miles east of the Chula Vista Civic Center. The project site is located immediately east of the EastLake Greens residential neighborhood and is approximately 0.5 mile west of the Lower Otay Reservoir. The location of EastLake Trails within the overall EastLake planned community is shown in Figure 4.1-1.

The project area is presently undeveloped fallow agricultural land and historically has been used for dry farming. The Fenton Ranch and its associated buildings are located in the northeastern corner of the site. Located along the eastern portion of the site is the Salt Creek drainage. At the southeastern portion of the site is a man-made earthen dam within the Salt Creek drainage area. A pond estimated at 1.5 acres is located north of the dam. The pond fills during the fall and winter months and is usually dry during the summer months. Just southwest of the earthen dam is a waste water pump station.

Existing development adjacent to the EastLake Trails site includes the major roads that form the project boundaries on three sides: paved Otay Lakes Road on the north, paved Hunte Parkway on the west, and Olympic Parkway, an approved but unbuilt road, on the south. The EastLake Greens residential neighborhood is located west of Hunte Parkway and is the only adjacent developed area.

Surrounding land uses to the north, east, and south of the project site include undeveloped agricultural land. To the north, across Otay Lakes Road is the future Woods neighborhood of the EastLake III GDP. The Salt Creek Ranch (now named Rolling Hills Ranch) is another 0.5 mile to the north and is located north of the northern boundary of the Woods neighborhood. The area to the east is open space and the future site for EastLake III Vistas neighborhood. The land on the Trails, Vistas, and Woods properties was previously farmed for Barley production and was at times fallow farmland. It is currently being farmed for oat production, primarily to be harvested for cattle feed and



Source: Cinti Land Planning 1997

FIGURE 4.1-1

Community Components

hay. The Woods property has also been used for cattle grazing in recent years. The land to the southwest of the Trails property is part of Otay Ranch and is currently being used for agricultural purposes.

EastLake Greens "Land Swap" Parcels

The two "Land Swap" parcels, totaling about 141.7~~125.6~~ acres on the western border of EastLake Greens residential neighborhood, are surrounded by a variety of urban land uses. The northern "Land Swap" parcel is bordered on the north by Otay Lakes Road. Land across this road to the north is part of the Telegraph Canyon Estates residential development project. This project consists of 350 residential units and is developed with approximately 50 percent of the homes occupied. The EastLake I commercial areas are located to the north and east of the northern "Land Swap" parcel and are on the opposite corner of the future SR-125 and Otay Lakes Road interchange. To the east, across the future right-of-way for SR-125 is a shopping center, EastLake High School, and a community park. Along the southwestern border is an 80-foot-wide easement for the San Diego Second Aqueduct and the 120-foot easement for San Diego Gas and Electric's transmission lines and towers.

CDFG, response #2

The southern "Land Swap" parcel is bordered on the north and east by vacant land owned by The EastLake Company, an 80-foot-wide utility easement for the San Diego Second Aqueduct, and the San Diego Gas and Electric 230-kV transmission line easement (120 feet wide) which runs parallel to the aqueduct. Just north of the site is a 30 million gallon water reservoir (EastLake Greens) owned and operated by the Otay Water District. To the west, the site is bordered by vacant land and the future alignment of SR-125; and to the south, the site is bordered by the Poggi Canyon property which is part of the undeveloped Otay Ranch project.

Land Use Designations, Plans, and Policies

The policies and land use designations that affect the development of EastLake Trails and the "Land Swap" parcels include the Chula Vista General Plan, Eastern Territories Area Plan, EastLake II General Development Plan, the SPA Plan for EastLake Greens.

The City of Chula Vista approved the EastLake area as a planned community in 1982. Since that time, the EastLake I GDP was expanded to become the EastLake II GDP, and the EastLake III GDP was adopted in 1990. All neighborhoods in EastLake II except for EastLake Trails have approved SPA plans. EastLake Trails was previously addressed in the 1989 Final EIR for EastLake Greens SPA and EastLake Trails pre-zone and annexation. The Trails property was included in this document for the purpose of a pre-zone and annexation of the property to the city.

City of Chula Vista General Plan

The General Plan land use designations for the "Land Swap" parcels are professional and administrative for the northern parcel and retail, commercial, and medium high density residential for the southern parcel according to the City of Chula Vista General Plan. The Trails property land use designations are low medium density residential (3-6 du/acre), retail, commercial, public quasi-public use, and parkland in the City of Chula Vista General Plan (City of Chula Vista 1989a). Policies within the General Plan that apply to the EastLake Greens and Trails projects include:

- Encourage the development of a diversity of housing types and prices.
- Assure that new development meets or exceeds a standard of high-quality planning and design.
- Encourage planned developments, with a coordinated mix of urban uses, open spaces, and amenities.
- For new developments in the Eastern Territories, the predominant character should be low medium density, single-family housing. Where appropriate in terms of physical setting encourage development of quality, large-lot housing.
- Provide water conservation through increased efficiency in essential uses and use of low water demand landscaping.
- Encourage, where safe and feasible, wastewater reclamation and use of reclaimed water for irrigation and other uses.
- Preserve to the extent feasible natural open space areas and corridors.
- Plan and implement a continuous greenbelt, open space, and trail system around the city providing connections to community and neighborhood parks and schools.

Eastern Territories Area Plan

The Eastern Territories Area Plan is the community plan component of the General Plan that encompasses the project site and vicinity. The 23,700-acre area referred to as the Eastern Territories is the largest planning area covered by the General Plan and lies to the east and south of the downtown area. The existing and proposed land uses for the Eastern Territories include a variety of residential densities, commercial industrial, public/quasi public, and open space. Several planned communities including EastLake, Sunbow, and Otay Ranch are located within the Eastern Territories. The following goals and objectives are identified in the plan:

- Direct new urban development in the Eastern Territories to broad mesa tops and away from environmentally sensitive areas such as floodplains, canyons, and steeply sloped areas.

- Require thorough environmental reviews of all proposed conversions of vacant or agricultural land to urban uses.

- Open space preservation and improvement of the sections of the Chula Vista greenbelt which are located in the planning area, including Salt Creek.

- Create, for the planning area as a whole, a balanced community of residential, commercial, and industrial uses. To the extent that employment uses may be more difficult to establish, provide for additional designations of commercial and industrial land and encourage retention of vacant land for commercial and industrial uses.

- Assure that all new developments are provided with acceptable levels of public services. Each development should include local public facilities required to serve the development and also contribute toward construction of city-wide facilities needed by the development.

- Encourage orderly and compact patterns of development, which would make maximum use of existing public facilities, and avoid "leap frog" development. In particular, encourage development phasing which will substantially buildout drainage and hydrologic basins with existing public service facilities before developing new basins.

EastLake II General Development Plan

The EastLake II General Development Plan was approved by the City Council June 30, 1992 (City of Chula Vista 1992). The EastLake II planned community zone includes five residential neighborhoods (EastLake Hills, Salt Creek I, EastLake Shores, EastLake Greens, and EastLake Trails), in addition to the EastLake Business Center. The adopted EastLake II GDP designates a wide range of land uses as shown in Table 3-1. These land uses include a variety of residential densities ranging from low to medium/high density, residential support uses, commercial, and employment uses, parks and recreation, and open space. Residential support uses are found within the Public/Quasi-Public (PQ) category. These uses include schools, utility sites, hospital/medical center, and other community facilities. Other uses include a high school, community parks, and elementary school sites to be shared with the EastLake III project to the north, and a golf course associated with EastLake Greens.

The "Land Swap" parcels are designated for urban uses in the Chula Vista General Plan but have no adopted General Development Plan. The proposed project would incorporate

the "Land Swap" parcels into the EastLake II GDP and the EastLake Greens SPA Plan. The proposed revised EastLake II General Development Plan designates the northern "Land Swap" parcel for professional and administrative uses and the southern "Land Swap" parcel for freeway commercial and medium/high density residential.

EastLake Greens Sectional Planning Area Plan

The EastLake Greens SPA was adopted in 1990 and includes a total of 853.2 acres for residential and non-residential uses with an overall density of 3.2 dwelling units per acre (City of Chula Vista 1989b). EastLake Greens was the third residential neighborhood to be developed within the planned community of EastLake. The SPA plan includes design guidelines and standards for the internal circulation network, a system of parks, open space, and trails, public facilities, and community design. The SPA plan also includes a Public Facilities and Financing Plan, an Air Quality Improvement Plan, and a Water Conservation Plan.

4.1.2 Impacts

EastLake Trails

The proposed project would change the utilization of the EastLake Trails site from primarily agricultural use and open space to an urban development for mostly residential use. This change has been planned for by the City of Chula Vista (Chula Vista General Plan), and the impacts were analyzed in prior environmental documentation for EastLake I developments (1982 EastLake FEIR and the 1985 EastLake I SPA FEIR). The conversion of agricultural land to new land use designations was also addressed in the EIR for the 1989 General Plan Update. The City of Chula Vista considers agriculture an interim use on the site, and the fact that the site is not situated on prime agricultural land, the loss of agricultural acreage due to the proposed development is not considered a significant land use impact. However, the project would contribute to a cumulative loss of agricultural lands in the Eastern Territories, but not significantly.

Proposed land uses for the EastLake Trails site include 224.8 acres of residential development with densities ranging from low single-family detached dwelling units to medium, single- and multi-family residential units; 48.4 acres for public parks, 6.5 acres for private recreation, 13 gross acres (10 net acres) for a school site, and 5 acres for open space. An additional 7.9 acres would be set aside to be planned in conjunction with the Vistas neighborhood SPA (future urban use).

The proposed EastLake Trails SPA is designed as a single-family (detached and attached) and multi-family residential neighborhood as depicted in the site plan (see Figure 3-5). The dominant land use designation is low-medium density residential with target densities in the range of 4-4.5 units/acre (R-3 and R-4). A private recreation facility (P-3)

is the proposed neighborhood focal point and is located adjacent to the public park/open space corridor along Salt Creek (P-1 and P-2). Medium density residential (R-5) is designated in close proximity to the private recreation facility. The low density residential (parcel R-1) is located south from parcel P-3 along Salt Creek to Olympic Parkway and north of the central access street. A portion of the planning area south of Olympic Parkway is designated for open space (OS). An elementary school site is reserved for the public/quasi-public (S-1) area. The parcels along the eastern boundary of EastLake Trails boundary have been designated as future urban areas (FU-1) to be planned in conjunction with the EastLake III Vistas residential neighborhood..

EastLake Trails, which is the fourth SPA to be developed within the planned community of EastLake, will continue the eastward development pattern established with prior neighborhoods both in design and planning policy and regulations.

With the exception of the conversion of retail commercial to residential, the proposed amendment to the adopted EastLake II GDP would involve slight changes in land use to reflect updated design concepts. The proposed changes to the EastLake Trails site consist of changes to the circulation system, converting the retail (C) designation in the northwest corner to low-medium density residential. The medium-high density residential in the northwest corner is replaced by low-medium residential. Other changes include:

1. Converting the two areas designated for PQ in the northern and central areas of the adopted EastLake II GDP to residential, and adding 4.5 acres at the northwest corner of the proposed linear park to be used for community purpose facilities (CPF).

2. The addition of a 13.0-acre elementary school site in the west-central portion of the Trails site.

3. Changing the configuration of the public park area in the Salt Creek corridor (P-1 and P-2), eliminating the central public parks and recreation site and replacing it with a private recreation site (P-3) adjacent to the community park (P-1 and P-2), and adding a community center/gymnasium in the northeast corner; and

4. The addition of a Future Urban (FU-1) designation to the area east of the Salt Creek corridor, with further planning of this area to occur concurrent with similar-level planning for the adjoining EastLake Vistas neighborhood within the EastLake III GDP.

The proposed land use designations for EastLake Trails would be compatible with current and planned surrounding land uses. The land uses within the developed EastLake Greens area to the west of the Trails would be continuous through EastLake Trails and would not create land use incompatibility impacts. Internally, the placement and access to a

community park adjacent to the single-family residential units in the northeastern portion of the Trails could represent a potential land use incompatibility, due to traffic circulation access and noise. However, the slope/landscape buffering between the park area and the units to the west and south and the placement of parking away from the units to the north would limit the potential for land use interface issues.

EastLake Greens "Land Swap" Parcels

The proposed EastLake Trails/Greens replanning Program would also revise the EastLake Greens SPA to include the "Land Swap" parcels, and remove the "Future Urban" category in the southwestern corner of EastLake Greens. The adopted EastLake Greens SPA Plan is shown in Figure 3-3 and the proposed EastLake Greens SPA is shown in Figure 3-4. Changes to the EastLake Greens SPA Plan are restricted to the "Land Swap" parcels and the southwest corner of the adopted SPA Plan adjacent to the southern "Land Swap" parcel. The proposed project would remove the future urban designation in the southwest corner of the adopted SPA Plan and with the addition of the southern "Land Swap" parcel, expand the R-9 designation from 8.5 to 65 acres. The SPA target density for the R-9 designation is proposed for an increase from 5.3 dwelling units/acre to 11.5 dwelling units/acre, yielding 750 dwelling units on this parcel. Since the adopted SPA allowed 45 dwelling units on this parcel, the net increase would be 705 units and the total for the EastLake Greens SPA would increase from 2,738 to 3,443.

The most prominent changes are (a) the addition of 24.7 acres of Professional and Administrative commercial in the northern "Land Swap" parcel; (b) in the southerly "Land Swap" parcel, 50 acres of Freeway Commercial will be added in addition to 50.2 acres of Medium Density residential. The added residential acreage combined with existing parcels R-9 (8.5 acres with 45 dwelling units) and Future Urban (6.3 acres), located immediately adjacent to the east, produce a 65-acre residential parcel with capacity for 750 dwelling units. Thus, the net increase as a result of the "Land Swap" parcel annexation is 141.7 acres and 705 dwelling units. It should be noted that the total added acreage includes 16.1 acres in circulation, easements, and open space.

Other changes include the conversion of 15 acres of commercial designation to low medium density residential; deletion of approximately 65 acres of Future Urban land resulting from the proposed GDP boundary adjustment, and minor changes to the Parks and Open Space acreage.

The proposed addition of professional and administrative use for the northern "Land Swap" parcel would be compatible with the existing land uses within EastLake Greens is an appropriate use adjacent to the State Route 125 (SR-125) corridor. The proposed multi-family residential (R-9) land use designation for the eastern portion of the southern "Land Swap" parcel would be compatible with the existing residential (R-9) in adjacent EastLake Greens. However, the construction of SR-125 to the west may present visual

impacts to the residential units proposed for the southern "Land Swap" parcel. However, potential impacts are unlikely since commercial use would visually separate SR-125 from the residential "Land Swap" parcel located east of EastLake Parkway. In addition, SR-125 would be below the elevation of the commercial area. Potential impacts could be reduced by appropriate residential unit orientation, buffering, and landscaping. The proposed commercial use for the western portion of the southern "Land Swap" parcel would be consistent with the existing land uses within EastLake Greens and would be compatible with the future SR-125.

4.1.3 Level of Significance Prior to Mitigation

The proposed land use changes for EastLake Trails and the "Land Swap" parcels are compatible with surrounding existing and proposed land uses. The proposed EastLake Trails project and the proposed amendments to the EastLake II GDP and EastLake Greens SPA would reflect the land use goals of the Chula Vista General Plan, as amended, and the Eastern Territories Area Plan. Therefore, no significant land use impacts would occur.

4.1.4 Mitigation Measures

No significant land use impacts would occur; therefore, no mitigation measures or policies are required.

4.1.5 Level of Significance After Mitigation

No significant land use impacts are associated with the proposed project.

4.2 Transportation/Traffic Circulation

The traffic study for the EastLake Trails/Greens Replanning Program was prepared by Linscott Law & Greenspan, Engineers (LLG) in June 1998 and is included as Appendix B. This traffic study accessed the traffic generation for the proposed development of EastLake Trails and the "Land Swap" parcels. Traffic volumes were generated using the San Diego Association of Governments (SANDAG) Series 8 Traffic Model for each of the study years.

4.2.1 Existing Conditions

Regulatory Requirements

City of Chula Vista

The City of Chula Vista Growth Management Threshold Standards includes traffic standards to ensure that a safe and efficient street system is maintained within the City of Chula Vista. The City ~~of Chula Vista~~'s Threshold Sstandard ~~threshold~~ is to maintain LOS C or better on all signalized arterial segments ~~at all intersections~~ with the exception that LOS D may occur ~~at signalized intersections,~~ but may not exceed a total of two hours per day. These standards ~~for intersections~~ were used in the traffic analysis. ~~The City of Chula Vista also maintains street segment and freeway criteria for defining significant impacts.~~

State of California

The state's Congestion Management Program (CMP) is intended to directly link land use, transportation, and air quality through level of service performance. Local agencies are required by statute to conform to the CMP.

The CMP requires an Enhanced CEQA Review for all large projects that are expected to generate more than 2,400 ADT or more than 200 peak hour trips. Since the project is calculated to generate over 200 peak hour trips, this level of review is required of the proposed project.

In 1993, the Institute of Transportation Engineers California Border Section and the San Diego Region Traffic Engineer's Council established a set of guidelines to be used in the preparation of traffic impact studies that are subject to the Enhanced CEQA review process. This published document, which is titled *1993 Guidelines for Congestion Management Program Transportation Impact Reports for the San Diego Region*, requires that a project study area be established as follows:

- All streets and intersections on CMP roadways or on "regionally significant arterials" where the project will add 50 or more peak hour trips in either direction.

- Mainline freeway locations where the project will add 150 or more peak hour trips in either direction.

Per these guidelines, the following regionally significant arterials and freeways were analyzed in this report, as required to satisfy the CMP:

- East H Street

- Telegraph Canyon Road/Otay Lakes Road

- Olympic Parkway

- Interstate 805 (I-805)

- SR-125

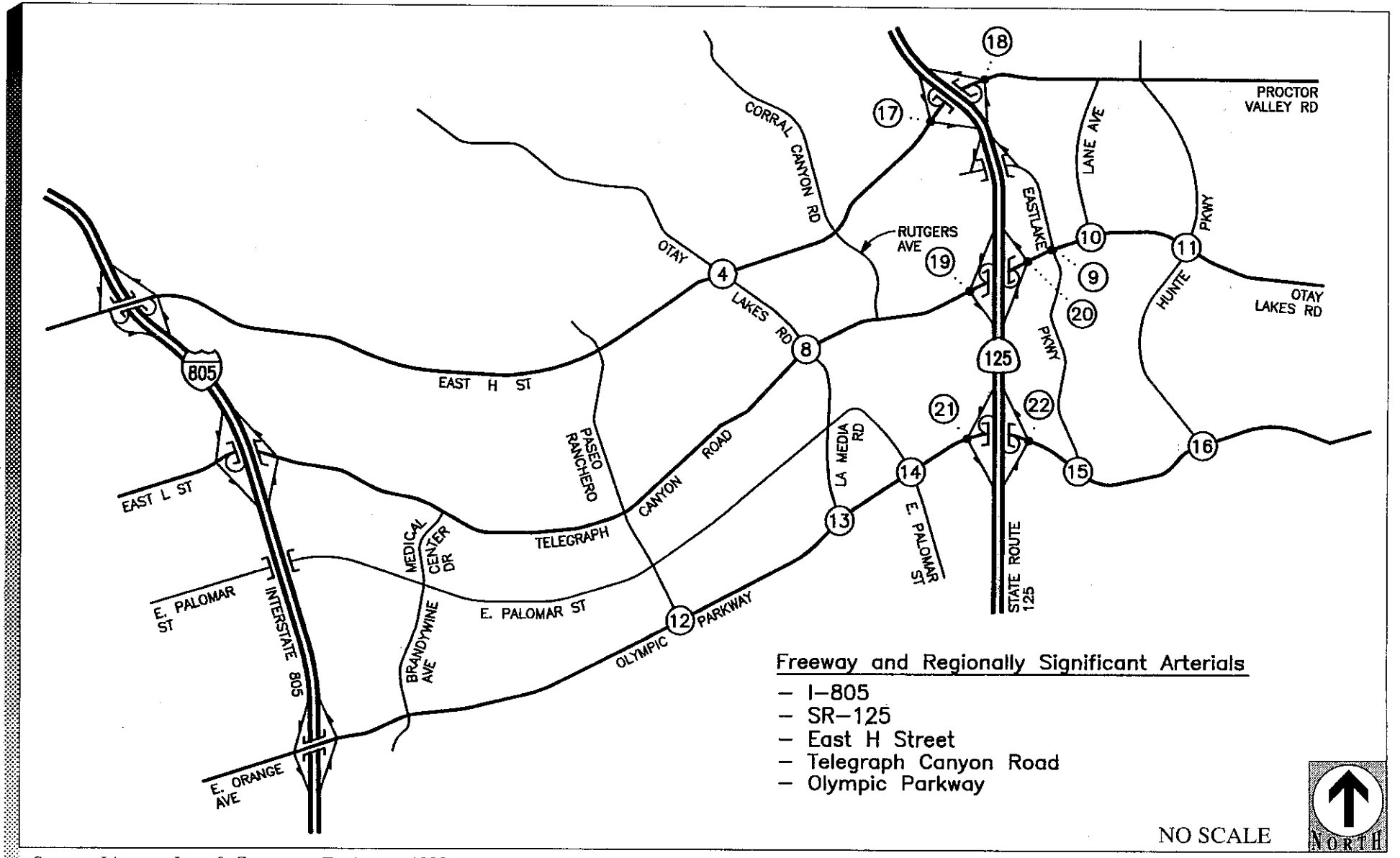
The Regional Growth Management Strategy (RGMS) LOS objective is LOS D (applies to East H Street, Telegraph Canyon Road/Otay Lakes Road, and Olympic Parkway). The Congestion Management Program LOS standard is LOS E (applies to I-805 and SR-125).

Area Circulation System

The EastLake Trails site and the northern and southern "Land Swap" parcels are presently undeveloped. Main access to the project area is provided by I-805 via East H Street and Telegraph Canyon Road/Otay Lakes Road. Olympic Parkway would provide access to the project site when completed in the future. The project site may be reached from EastLake Parkway and Hunte Parkway off Otay Lakes Road. The following is a brief description of the existing roads serving the project area (Figure 4.2-1).

East H Street is classified as a six-lane prime arterial from I-805 to Otay Lakes Road, fourth-lane major from Otay Lakes Road to SR-125, six-lane prime arterial from SR-125 to Hunte Parkway and four-lane major east of Hunte Parkway. Bike lanes and bus stops are located intermittently on both sides of the road along East H Street. On-street parking is prohibited.

Telegraph Canyon Road/Otay Lakes Road is classified as a six-lane prime arterial. Telegraph Canyon Road changes into Otay Lakes Road at intersection 8 on Figure 4.2-1. At present, it is generally a six-lane facility that transitions into a two-lane facility east of Hunte Parkway. Bike lanes are on both sides of the road and bus stops are intermittently located along Telegraph Canyon Road and Otay Lakes Road. On-street parking is



Source: Linscott, Law & Greenspan Engineers 1998

FIGURE 4.2-1

Area Circulation System with SR-125

prohibited. The posted speed limit is 40 mph from I-805 to the intersection of Crest Drive and Oleander Avenue, 45 mph from the intersection of Crest Drive and Oleander Avenue to Old Telegraph Canyon Road, and 50 mph from Old Telegraph Canyon Road east to City Limits (east of Lane Avenue).

Olympic Parkway (Orange Avenue) will provide direct access from I-805 to the study area when completed. It is classified as a six-lane prime arterial from I-805 to Hunte Parkway and transitions to a four-lane major roadway to the Olympic Training Center. Currently, Olympic Parkway terminates at Brandywine Avenue, just east of I-805 and presently operates as a four-lane major street with bike lanes on both sides from I-805 to Oleander Avenue. East of Oleander Avenue, it is a two-lane roadway with improvement along the south side only. On-street parking is prohibited. Extension of Olympic Parkway to the east is planned by the year 2005.

I-805 is a north-south freeway west of the project vicinity that originates in south San Diego County and terminates at its intersection with the I-5 freeway to the north. Local interchanges in the project vicinity area are at Olympic Parkway (East Orange Avenue), Telegraph Canyon Road, and East H Street. I-805 is generally an eight-lane freeway between I-905 and SR-54 with auxiliary lanes present between some interchanges.

Paseo Ranchero is classified as a class 1 collector road and at present extends from Rancho del Rey Parkway to Telegraph Canyon Road. Currently, four lanes of travel are provided with bike lanes on both sides of the road. Curbside parking is prohibited. The speed limit is 35 mph north of East H Street and 40 mph south of East H Street. Paseo Ranchero is planned to extend south of Telegraph Canyon Road to the future Olympic Parkway extension and beyond to Otay Valley Road as a six-lane prime arterial.

Otay Lakes Road is classified as a six-lane prime arterial. At present, Otay Lakes Road operates as a four-lane street providing north-south access between Bonita Road and Telegraph Canyon Road, at which point it turns to the east. Otay Lakes Road transitions into a six-lane road east of Rutgers Road, and eventually into a two-lane road east of Hunte Parkway. Bike lanes are on both sides of the road. The posted speed limit is 50 mph from the intersection of Telegraph Canyon Road and La Media Road east to the City Limits (east of Lane Avenue). In the future, La Media Road is planned to extend to the south from the intersection of Telegraph Canyon Road/Otay Lakes Road to Olympic Parkway.

Corral Canyon Road/Rutgers Avenue is east of Otay Lakes Road and is classified as a Two-Lane Collector within the County of San Diego jurisdiction and becomes a Class 2 (Three-Lane) collector within the City of Chula Vista limits. Corral Canyon Road becomes Rutgers Avenue, a Class 2 collector, south of East H Street. At present, two lanes of travel are provided north of East H Street and four lanes of travel on the portion

south of East H Street to Gotham Street. Bike lanes are on both sides of the street and curbside parking is prohibited north of Gotham Street.

EastLake Parkway is a four-lane major from SR-125 to the northern boundary of the "Land Swap" parcels and six-lane prime arterial from there to Olympic Parkway. At present, EastLake Parkway provides access to the site off Otay Lakes Road and will extend to future Olympic Parkway on the southern end of the project site. Bike lanes exist on either side of the road and curbside parking is prohibited. The current speed limit is 40 mph.

Hunte Parkway is a four-lane major from Proctor Valley Road to Olympic Parkway, six-lane prime arterial from Olympic Parkway to Birch Parkway within the Otay Ranch, four-lane major from Birch Parkway to Rock Mountain Road. At present, it extends south of Otay Lakes Road as a four-lane street. There are bike lanes on either side of the road and curbside parking is prohibited. Hunte Parkway is planned to connect with Olympic Parkway to the south with development of the EastLake project.

Existing Roadway Segment Volumes and Intersection Conditions

Street system operating conditions are typically described in terms of level of service (LOS). Level of service is a term used to describe prevailing conditions and their effect on traffic. Level of service is a qualitative measure of the effect of such factors as travel speed, travel time, interruptions, freedom to maneuver, safety, driving comfort, and convenience. LOS is expressed as a letter designation from A to F, with A representing the best operating conditions and F the worst. LOS A through C represent free flowing traffic, conditions with little or no delay. LOS D represents limited congestion and some delay; however, the duration of periods of delay are generally acceptable to most people.

Table 4.2-1 shows the existing average daily traffic volumes and level of service for roads in the project vicinity. Of the street segments analyzed for the traffic report, the following road segments currently operate in excess of their rated capacity:

- East H Street, I-805 to Terra Nova Drive (LOS E)
- Telegraph Canyon Road, I-805 to Paseo del Rey (LOS F)

Otay Lakes Road at Bonita Road and at Ridgeview Way/Canyon Drive operates at LOS C. All other street segments operated at LOS A or B.

All signalized intersections were analyzed based on the "operational analysis" procedure for signalized intersections, as defined in the 1994 Highway Capacity Manual (HCM). The signalized intersections were analyzed during the AM and PM peak hours by determining the average delay (seconds) per vehicle entering the intersection. The delay

TABLE 4.2-1
EXISTING STREET SEGMENT OPERATIONS

Roadway	Classification	Capacity (LOS D)	ADT	LOS
East H Street				
I-805 to Terra Nova Drive	Primary Arterial 6	56,300	60,440	E
Terra Nova Drive/Paseo del Rey	Primary Arterial 6	56,300	41,600	B
Paseo del Rey to Paseo Ranchero	Primary Arterial 6	56,300	32,480	A
Paseo Ranchero/Otay Lakes Road	Primary Arterial 6	56,300	32,500	A
Otay Lakes Road/Corral Canyon Road	4-lane Major	33,800	17,000	A
Corral Canyon Road/EastLake Drive	4-lane Major	33,800	11,000	A
EastLake Drive/SR-125	*	*	*	
Proctor Valley Road				
SR-125/Mt. Miguel Road	Primary Arterial 6	*	*	*
Mt. Miguel Road/Rancho Janal Drive	Primary Arterial 6	*	*	*
Rancho Janal Drive/Hunte Parkway	Primary Arterial 6	*	*	*
East of Hunte Parkway	Class 1 Collector	*	*	*
Telegraph Canyon Road				
I-805/Paseo del Rey	6-lane Major	45,000	50,800	F
Paseo del Rey/Paseo Ladera	Primary Arterial 6	56,300	40,600	B
Paseo Ladera/Paseo Ranchero	Primary Arterial 6	56,300	33,500	A
Paseo Ranchero/Otay Lakes Road	Primary Arterial 6	56,300	33,100	A
Otay Lakes Road				
Bonita Road/Ridgeview Way	4-lane Major	33,800	26,420	C
Ridgeview Way/East H Street	4-lane Major	33,800	21,100	A
East H Street/Telegraph Canyon Road	4-lane Major	33,800	16,100	A
Telegraph Canyon Rd/Rutgers Ave.	Primary Arterial 6	56,300	25,800	A
Rutgers Avenue/SR-125	*	*	*	*
SR-125/EastLake Parkway	*	*	*	*
EastLake Parkway/Lane Avenue	Primary Arterial 6	56,300	6,800	A
Lane Avenue to Hunte Parkway	Primary Arterial 6	56,300	4,220	A
Hunte Parkway/Wueste Road	Class 2 Collector	13,500	3,250	A
East Palomar Street				
Paseo Ladera/Paseo Ranchero	*	*	*	*
Paseo Ranchero/La Media Road	*	*	*	*
La Media Road/Olympic Parkway	*	*	*	*
Olympic Parkway				
I-805/Brandywine Avenue	4-lane Major	33,800	12,900	A
Brandywine Avenue/Paseo Ranchero				

TABLE 4.2-1
EXISTING STREET SEGMENT OPERATIONS
(continued)

Roadway	Classification	Capacity (LOS D)	ADT	LOS
Paseo Ranchero/La Media Road				
La Media Road/SR-125				
SR-125/EastLake Parkway				
EastLake Parkway/Hunte Parkway				
Hunte Parkway/Wueste Road				
Paseo Ranchero				
Rancho del Rey Parkway/East H Street	Class 1 Collector	24,800	6,500	A
East H Street/East J Street	Class 1 Collector	24,800	2,370	A
East JStreet/Telegraph Canyon Road	Class 1 Collector	24,800	1,470	A
Telegraph Canyon Rd/East Palomar St.	*	*	*	*
East Palomar Street/Olympic Parkway	*	*	*	*
Olympic Parkway/Otay Valley Road	*	*	*	*
La Media Road				
Telegraph Canyon Rd/East Palomar St.	*			
East Palomar Street/Olympic Parkway	*	*	*	*
Olympic Parkway/Birch Parkway	*	*	*	*
Birch Parkway/Rock Mountain Road	*	*	*	*
Rock Mountain Road/Otay Valley Road	*	*	*	*
EastLake Parkway				
North of Otay Lakes Road	4-lane Major	33,800	9,700	A
Otay Lakes Road/Clubhouse Drive	4-lane Major	33,800	10,800	A
Clubhouse Drive/Olympic Parkway				
Olympic Parkway/Birch Parkway				
Hunte Parkway				
Proctor Valley Road/Otay Lakes Road	*			
Otay Lakes Road/Clubhouse Drive	4-lane Major	33,800	600	A
Clubhouse Drive/Olympic Parkway	*			
Olympic Parkway/Birch Parkway	*			
Lane Avenue				
Proctor Valley Road/Otay Lakes Road	Class 1 Collector	24,800	1,800	A
Rutgers Avenue				
East H Street/Telegraph Canyon Road	Class 2 Collector	13,500	4,800	A
Paseo del Rey				
East H Street/Telegraph Canyon Road	Class 2 Collector	13,500	9,400	B

EB = eastbound; WB = westbound
ADT = average daily traffic; LOS = level of service
*does not exist.

values (seconds) were qualified by giving a LOS or "Grade" to the corresponding delay values for the intersection as a whole. Levels of service for signalized intersections vary from A (free flow, little delay) to F (forced flow, significant delays).

The unsignalized intersections were analyzed by determining the delay and levels of service based on the 1994 HCM.

Of the intersections analyzed for the traffic report, most operate at LOS C or better. The City of Chula Vista's standard threshold is to maintain LOS C or better at all intersections with the exception that LOS D may occur at signalized intersections, but may not exceed a total of two hours per day.

The following intersections currently operate below LOS D during the AM or PM:

- Telegraph Canyon Road and I-805 northbound ramps (AM, LOS E)
- East H Street and I-805 southbound ramps (PM, LOS E)
- Telegraph Canyon Road and I-805 southbound ramps (PM, LOS F)
- Telegraph Canyon Road and I-805 northbound ramps (PM, LOS F)

Existing Freeway Segment Conditions

Key freeway segments were assessed during the peak hours based on the 1994 HCM. Freeway segment LOS is based on the density for a given free-flow speed on the freeway. The following segments of I-805 currently operate at LOS D during the AM or PM:

- Telegraph Canyon Road to Olympic Parkway (AM, northbound).
- Telegraph Canyon Road to Olympic Parkway (PM, northbound and southbound).
- Olympic Parkway to Otay Mesa (AM, northbound).
- Olympic Parkway to Otay Mesa (PM, northbound and southbound).

All other existing freeway segments operate at LOS B or C.

CMP Arterials

The CMP arterials were assessed during the PM peak hour based on the 1994 HCM. The assessment of key arterials is necessary to satisfy the requirements of the CMP. All arterials operate at LOS D or better, except East H Street and Telegraph Canyon Road

operate at LOS E during the AM peak hour (westbound) and PM peak hour (eastbound) near I-805.

4.2.2 Impacts

Significance Criteria

The following criteria was utilized to determine if an impact to an intersection, street segment or freeway is considered significant, and are based on City of Chula Vista Growth Management Standards. These standards state that LOS C or better should be maintained at all intersections with the exception that LOS D may occur at signalized intersections for a period not to exceed a total of two hours per day.

Significant impacts can be characterized as either direct project significant impacts or cumulative significant impacts.

Street Segments

A street segment impact would be considered a direct project significant impact **only if all three** of the following criteria are met.

1) Project contributes 800 or more ADT to the segment; and

2) Project traffic constitutes 5 percent or more of the total forecasted ADT on that segment for the given study year; and

3) Segment LOS is LOS D or worse with project traffic for more than two hours.

However, even if all three criteria were met, the segment impact would not be considered significant if all of the intersections along the segment were calculated at LOS D or better during both the AM and PM peak hour. This is because intersection analysis results are more indicative of future roadway operations than street segment analysis results.

If the street segment LOS is LOS E or LOS F with project traffic, however, the above three criteria are not met, a significant **cumulative** impact is identified.

Intersections

An intersection impact would be considered a direct project significant impact only if **both** of the following criteria are met. If only number one is met, the impact would be considered to be a significant cumulative impact but not a direct project impact.

1) Future (year 2000, 2005, and 2010) intersection LOS with project is LOS E or LOS F; and

2) Project traffic constitutes 5 percent or more of total entering intersection volume for the given study year.

Freeways

A freeway impact would be considered a direct project significant impact only if the following **two criteria** are both met.

1) Freeway segment LOS is LOS E or LOS F.

2) Project constitutes 5 percent or more of the total forecasted ADT on that freeway segment for that given study year; and

If only criteria one is met, the impact is considered a significant cumulative impact.

Project Scenarios

The following five scenarios with circulation network assumptions were input into the SANDAG Series 8 Traffic Model. If the roadway network assumed in these scenarios is not in place at the time frames anticipated in the traffic models, then reevaluation of the regional roadway infrastructure may be required in the future.

- Year 2000

  Without SR-125 and without Olympic Parkway east of Brandywine Avenue.

- Year 2005

  With and without SR-125 completed as a toll road; Olympic Parkway completed between I-805 and Wueste Road as a four-lane roadway; and Hunte Parkway and EastLake Parkway completed southward between Clubhouse Drive and Olympic Parkway as a four-lane roadway.

- Year 2010

  With SR-125 completed as a toll road; Olympic Parkway completed between I-805 and Hunte Parkway as a six-lane roadway and between Hunte Parkway and Wueste Road as a four-lane road; and I-805 and East Palomar Street half-diamond interchange completed.

- Buildout

  With SR-125 completed as a freeway (not a toll road), and several other regionally significant roadways constructed.

Project Trip Generation

The amount of traffic expected to be generated by the project for the four study years was determined based on the proposed land uses for EastLake Trails and the "Land Swap" parcels and the SANDAG model calibrated trip generation rates. A summary of the proposed land uses, trip generation rates, and trip generation volumes at the completion of the project is provided in Table 4.2-2.

The traffic analysis prepared for the project also included interim trip generation calculations as the project is completed which correspond to the modeled year scenarios listed above. The project is calculated to generate 6,060 ADT for the year 2000, 11,990 ADT in the year 2005, 48,780 ADT in the year 2010 with over one-half of this traffic generated by the 50-acre retail portion of the "Land Swap" area. The project is expected to be completed and occupied by the year 2010; therefore, at buildout the project is calculated to generate 48,780 ADT.

Future Circulation System Operations

For each study year, the project-generated traffic was assigned to the street system using the SANDAG Select Zone Assignment (SZA). The SZA matches the production trips generated by the residential portion of a project with trip attractor zones in other areas of San Diego County containing uses such as employment and retail. The distribution of project trips for the circulation system was done for commuter peak hours as opposed to an ADT basis since project impacts are most likely to occur during the commuter hours.

The impacts on the future circulation system are described for the five modeled project scenarios:

- Year 2000 (without SR-125)
- Year 2005 (without SR-125)
- Year 2005(with SR-125)
- Year 2010 (with SR-125 and "Land Swap" parcels developed)
- Buildout

TABLE 4.2-2
PROJECT TRAFFIC GENERATION BUILDOUT

Use	Size	Daily Trip Ends (ADT)		A.M. Peak Hour				P.M. Peak Hour			
		Rate	Volume	% of ADT	In:Out Split	Volume In	Volume Out	% of ADT	In:Out Split	Volume In	Volume Out
Trails											
Single-family residential	1,150 du	8	9,200	8	3:7	220	515	10	7:3	645	280
Elementary school	10 acres	145	1,450	26	6:4	230	150	5	3:7	20	50
Passive park	28.2 acres	5	140	4	7:3	5	0	8	5:5	5	5
Active park	24.1 acres	50	1,200	4	7:3	35	15	8	5:5	50	50
Subtotal			11,990			490	680			720	385
Land Swap Area											
Office	24.7 acres	300	7,410	14	9:1	935	105	13	2:8	195	770
Multi-family residential	750 du	6.7	5,030	8	2:8	80	320	10	7:3	350	150
Retail	50.7 acres	500	25,350	2	7:3	355	150	9	5:5	1,140	1,140
Subtotal			37,790			1,370	575			1,685	2,060
TOTAL			49,780			1,860	1,255			2,405	2,445

SOURCE: Generation rates are per SANDAG calibrated rates.

NOTE: Rate is a trip end dwelling unit (du) or per acre. Trip ends are one-way traffic movements, entering or leaving. All ADTs are rounded to nearest 10 and peak hour volumes are rounded to the nearest 5. Net acreage of school was utilized.

For each of the above scenarios, impacts (direct and cumulative) have been identified regarding street segments, intersections, freeways, and CMP prime arterials. The following discussions summarize the results of the impact analysis.

Year 2000 Impacts (without SR-125)

Traffic conditions for year 2000 were analyzed without SR-125. Traffic volumes with the project traffic added are shown in Figure 4.2-2.

The results of the analysis of street segment volumes show that all street segments are calculated to operated at LOS D or better in the year 2000 with the following exceptions:

- East H Street, I-805 to Terra Nova Drive (LOS E)
- Telegraph Canyon Road, I-805 to Paseo del Rey (LOS F)

All intersections in the project area are calculated to operate at LOS D or better during the AM and PM peak hours except for the following intersection:

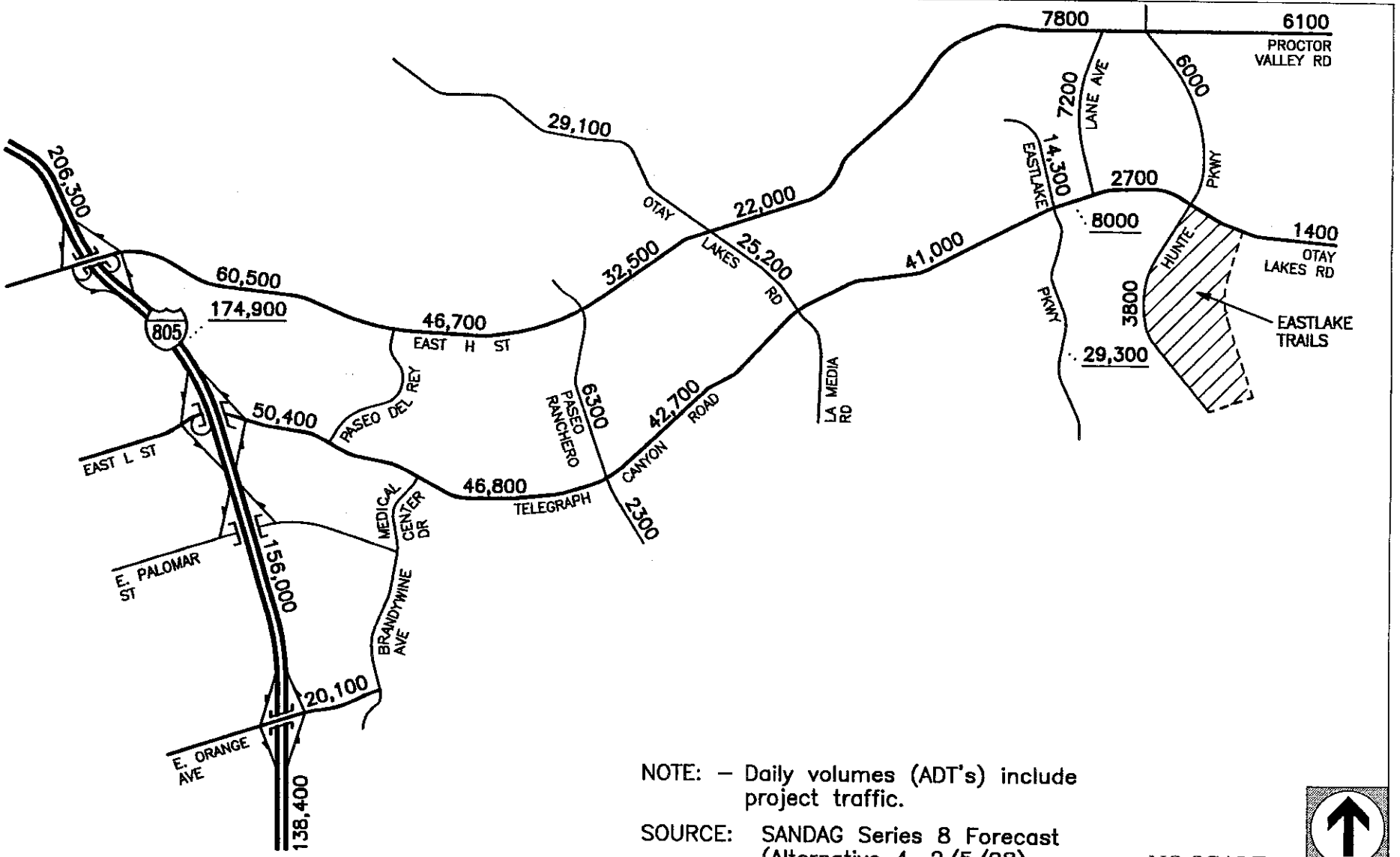
- East H Street and I-805 southbound ramps (LOS F, PM peak)
- Telegraph Canyon Road and I-805 northbound ramps (LOS F, AM and PM peak)

A decrease in the delay, from existing conditions to the year 2000, at the intersection of Telegraph Canyon Road and I-805 southbound ramps is due to the planned improvements which are scheduled for completion in 1999.

Peak hour freeway operations analyses show that I-805 is calculated at LOS D or better in the project area with the exception of the portion between East H Street and Bonita Road (LOS E).

Peak hour CMP arterial operations analyses in the year 2000 show that LOS E is calculated on East H Street (I-805 to Otay Lakes Road) and on Telegraph Canyon Road (I-805 to Medical Center Drive). All other arterial segments are calculated at LOS D or better.

The year 2000 impacts listed above for street segments, intersections, freeways, and CMP prime arterials are not considered direct project impacts, but rather are cumulative impacts pursuant to the city-defined significance thresholds. In each instance, the project contributes less than 5 percent of the traffic. Mitigation measures for these cumulative impacts include improvements to the East H Street/I-805 southbound ramps and the extension of Olympic Parkway eastward to Paseo Ranchero. A detailed description of these and other recommended mitigation measures is provided in Section 4.2.5 below.



Source: Linscott, Law & Greenspan Engineers 1998

FIGURE 4.2-2

Daily Traffic Volumes, Year 2000, without SR-125

RECON

Year 2005 Impacts (without SR-125)

Traffic conditions for 2005 were analyzed without SR-125. Traffic volumes with the project traffic added are shown in Figure 4.2-3 and summarized in Table 4.2-3.

The results of the analysis of street segment volumes show that all street segments are calculated to operate at LOS D or better in the year 2005 with the following exceptions:

- East H Street, I-805 to Terra Nova Drive (LOS E)
- Otay Lakes Road, East H Street to Telegraph Canyon Road (LOS E)
- Olympic Parkway, I-805 to Paseo Ranchero (LOS F)

The results show that all intersections in the project area are calculated to operate at LOS D or better during the AM and PM peak hours. Therefore, there would be no direct or cumulative impacts to intersections.

Peak hour freeway operations analyses show that several sections of I-805 are calculated to operate at poor levels of service, LOS E or LOS F, in the year 2005, assuming SR-125 is not constructed.

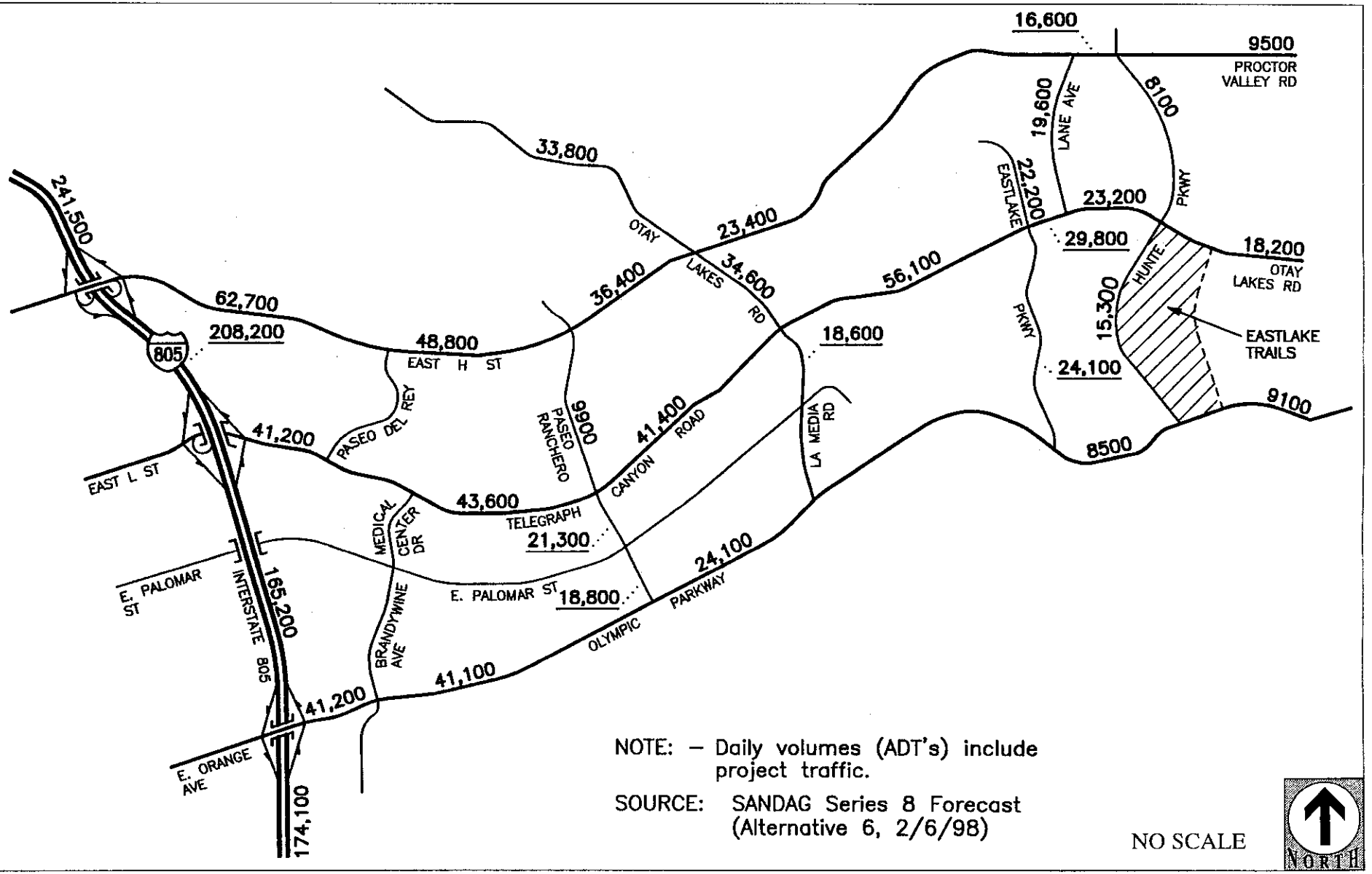
Peak hour CMP arterial operations analyses show that East H Street and Olympic Parkway are calculated to operate at LOS E during peak periods near the I-805. All other arterial segments are calculated at LOS D or better.

The year 2005 (without SR-125) impacts listed above for street segments, freeways, and CMP prime arterials are not considered direct project impacts, but rather are cumulative impacts pursuant to the city-defined significance thresholds. In each instance, the project contributes less than 5 percent of the traffic or adequate peak hour LOS are calculated at the intersections along the segments. Recommended mitigation measures for these cumulative impacts include the construction of SR-125, improvements to Otay Lakes Road, improvement of Olympic Parkway to Prime Arterial Standards, and providing additional lanes on I-805. A detailed description of these and other recommended mitigation measures is provided in Section 4.2.5 below.

Year 2005 Impacts (with SR-125)

Traffic conditions for 2005 were analyzed with SR-125. Traffic volumes with the project traffic added are shown in Figure 4.2-4 and summarized in Table 4.2-4.

The results of the analysis of street segment volumes show that all street segments are calculated to operate at LOS D or better in the year 2005 with SR-125.



Source: Linscott, Law & Greenspan Engineers 1998

FIGURE 4.2-3

Daily Traffic Volumes, Year 2005, without SR-125

RECON

TABLE 4.2-3
YEAR 2005 (WITHOUT SR-125) STREET SEGMENT OPERATIONS

Roadway	Classification	Capacity (LOS D)	Year 2005 ADT	LOS	Project Contribution (%)
East H Street					
I-805 to Terra Nova Drive	Primary Arterial 6	56,300	62,700	E	2
Terra Nova Drive/Paseo del Rey	Primary Arterial 6	56,300	49,000	C	3
Paseo del Rey to Paseo Ranchero	Primary Arterial 6	56,300	48,800	C	4
Paseo Ranchero/Otay Lakes Road	Primary Arterial 6	56,300	36,400	A	5
Otay Lakes Road/Corral Canyon Road	4-lane Major	33,800	23,400	B	4
Corral Canyon Road/EastLake Drive	4-lane Major	33,800	19,900	A	4
EastLake Drive/SR-125	4-lane Major	33,800	-	-	-
Proctor Valley Road					
SR-125/Mt. Miguel Road	-	-	-	-	-
Mt. Miguel Road/Rancho Janal Drive	Primary Arterial 6	56,300	14,600	A	NOM
Rancho Janal Drive/Hunte Parkway	Primary Arterial 6	56,300	16,600	A	NOM
East of Hunte Parkway	Class 1 Collector	24,800	9,500	A	NOM
Telegraph Canyon Road					
I-805/Paseo del Rey	6-lane Major	45,000	41,200	D	3
Paseo del Rey/Paseo Ladera	Primary Arterial 6	56,300	43,600	B	3
Paseo Ladera/Paseo Ranchero	Primary Arterial 6	56,300	33,200	A	4
Paseo Ranchero/Otay Lakes Road	Primary Arterial 6	56,300	41,400	B	4
Otay Lakes Road					
Bonita Road/Ridgeview Way	4-lane Major	33,800	33,800	D	3
Ridgeview Way/East H Street	4-lane Major	33,800	30,800	D	3
East H Street/Telegraph Canyon Road	4-lane Major	33,800	34,600	E	6
Telegraph Canyon Road/Rutgers Avenue	Primary Arterial 6	56,300	56,100	D	8
Rutgers Avenue/SR-125	-	-	-	-	-

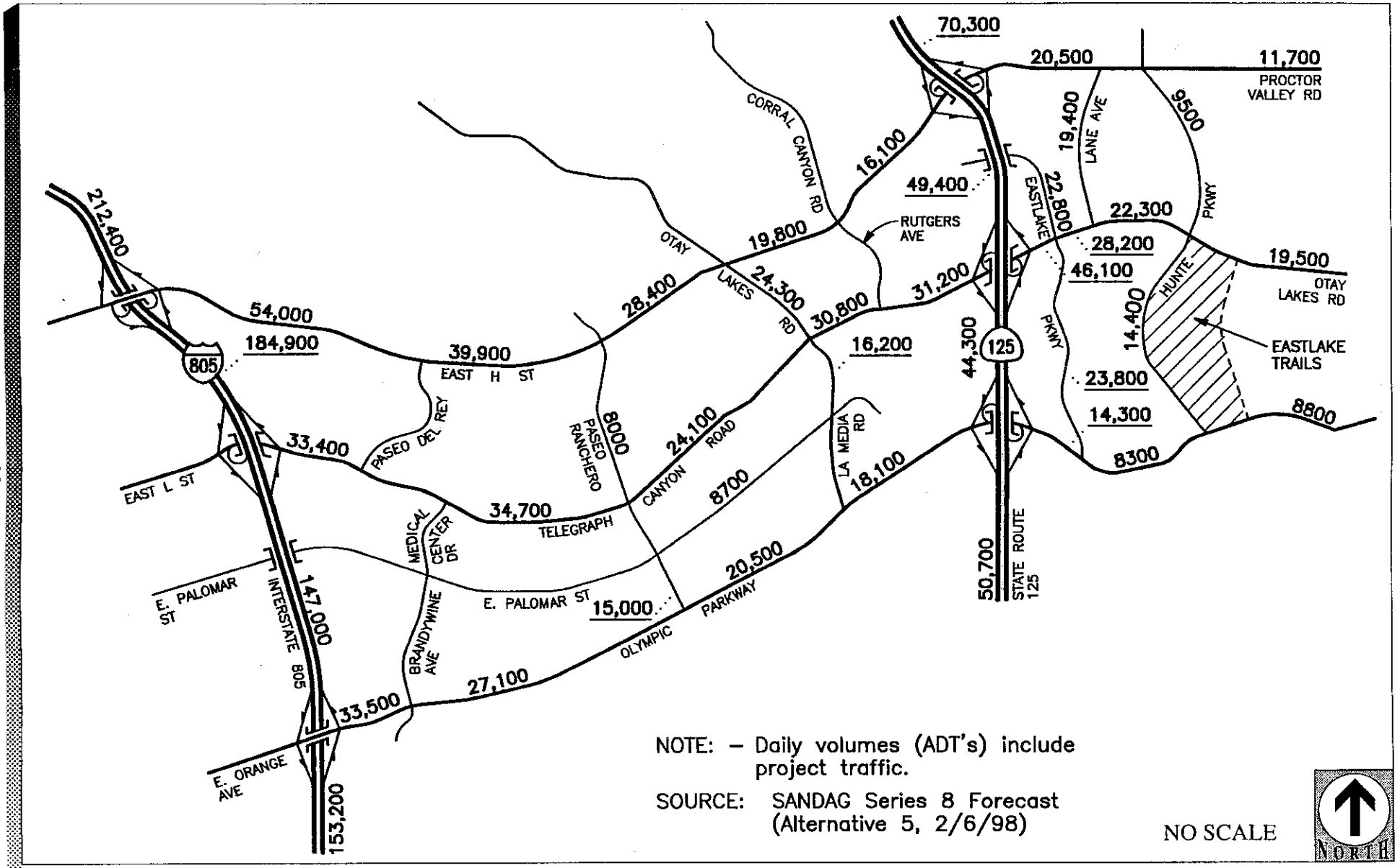
TABLE 4.2-3
YEAR 2005 (WITHOUT SR-125) STREET SEGMENT OPERATIONS
(continued)

Roadway	Classification	Capacity (LOS D)	Year 2005 ADT	LOS	Project Contribution (%)
Otay Lakes Road (cont.)					
SR-125/EastLake Parkway	-	-	-	-	-
EastLake Parkway/Lane Avenue	Primary Arterial 6	56,300	29,800	A	2
Lane Avenue to Hunte Parkway	Primary Arterial 6	56,300	23,200	A	22
East of Hunte Parkway	Primary Arterial 6	56,300	18,200	A	1
East Palomar Street					
Paseo Ladera/Paseo Ranchero	-	-	-	-	-
Paseo Ranchero/La Media Road	Class 1 Collector	24,800	9,400	A	NOM
La Media Road/Olympic Parkway	-	-	-	-	-
Olympic Parkway					
I-805/Medical Center Drive	4-lane Major	33,800	41,200	F	3
Medical Center Drive/Paseo Ranchero	4-lane Major	33,800	41,100	F	4
Paseo Ranchero/La Media Road	4-lane Major	33,800	24,100	B	10
La Media Road/SR-125	-	-	-	-	-
SR-125/EastLake Parkway	-	-	-	-	-
EastLake Parkway/Hunte Parkway	4-lane Major	33,800	8,500	A	28
Hunte Parkway/Wueste Road	4-lane Major	33,800	9,100	A	6
Paseo Ranchero					
East H Street/Telegraph Canyon Road	Class 1 Collector	24,800	9,900	A	2
Telegraph Canyon Road/East Palomar Street	Class 1 Collector	24,800	21,300	C	1
East Palomar Street/Olympic Parkway	Class 1 Collector	24,800	18,800	B	1
Olympic Parkway/Otay Valley Road	-	-	-	-	-

TABLE 4.2-3
YEAR 2005 (WITHOUT SR-125) STREET SEGMENT OPERATIONS
(continued)

Roadway	Classification	Capacity (LOS D)	Year 2005 ADT	LOS	Project Contribution (%)
La Media Road					
Telegraph Canyon Road/East Palomar Street	Primary Arterial 6	56,300	18,600	A	1
East Palomar Street/Olympic Parkway	Primary Arterial 6	56,300	11,500	A	2
Olympic Parkway/Birch Parkway	-	-	-	-	-
Birch Parkway/Rock Mountain Road	-	-	-	-	-
Rock Mountain Road/Otay Valley Road	-	-	-	-	-
EastLake Parkway					
North of Otay Lakes Road	4-lane Major	33,800	22,200	A	2
Otay Lakes Road/Clubhouse Drive	4-lane Major	33,800	24,100	B	4
Clubhouse Drive/Olympic Parkway	4-lane Major	33,800	5,000	A	35
Olympic Parkway/Birch Parkway	-	-	-	-	-
Hunte Parkway					
Proctor Valley Road/Otay Lakes Road	4-lane Major	33,800	8,100	A	11
Otay Lakes Road/Clubhouse Drive	4-lane Major	33,800	15,300	A	50
Clubhouse Drive/Olympic Parkway	4-lane Major	33,800	8,500	A	50
Olympic Parkway/Birch Parkway	-	-	-	-	-
Lane Avenue					
Proctor Valley Road/Otay Lakes Road	Class 1 Collector	24,800	19,600	C	3
Rutgers Avenue					
East H Street/Telegraph Canyon Road	Class 2 Collector	13,500	9,400	B	NOM

NOTE: Capacities based on City of Chula Vista Standards.
EB = eastbound; WB = westbound; LOS = level of service; NOM = nominal
- = does not exist



Source: Linscott, Law & Greenspan Engineers 1998

FIGURE 4.2-4

Daily Traffic Volumes, Year 2005, with SR-125

RECON

TABLE 4.2-4
YEAR 2005 (WITH SR-125) STREET SEGMENT OPERATIONS

Roadway	Classification	Capacity (LOS D)	Year 2005 ADT	LOS	Project Contribution (%)
East H Street					
I-805 to Terra Nova Drive	Primary Arterial 6	56,300	54,000	D	1
Terra Nova Drive/Paseo del Rey	Primary Arterial 6	56,300	39,900	B	1
Paseo del Rey to Paseo Ranchero	Primary Arterial 6	56,300	39,900	B	1
Paseo Ranchero/Otay Lakes Road	Primary Arterial 6	56,300	28,400	A	1
Otay Lakes Road/Corral Canyon Road	4-lane Major	33,800	19,800	A	2
Corral Canyon Road/EastLake Drive	4-lane Major	33,800	16,100	A	3
EastLake Drive/SR-125	4-lane Major	33,800	16,300	A	3
Proctor Valley Road					
SR-125/Mt. Miguel Road	Primary Arterial 6	56,300	18,900	A	NOM
Mt. Miguel Road/Rancho Janal Drive	Primary Arterial 6	56,300	20,500	A	NOM
Rancho Janal Drive/Hunte Parkway	Primary Arterial 6	56,300	21,100	A	NOM
East of Hunte Parkway	Class 1 Collector	24,800	11,700	A	NOM
Telegraph Canyon Road					
I-805/Paseo del Rey	6-lane Major	45,000	33,400	B	1
Paseo del Rey/Paseo Ladera	Primary Arterial 6	56,300	34,700	A	2
Paseo Ladera/Paseo Ranchero	Primary Arterial 6	56,300	21,800	A	2
Paseo Ranchero/Otay Lakes Road	Primary Arterial 6	56,300	24,100	A	2
Otay Lakes Road					
Bonita Road/Ridgeview Way	4-lane Major	33,800	20,600	A	3
Ridgeview Way/East H Street	4-lane Major	33,800	21,000	A	3
East H Street/Telegraph Canyon Road	4-lane Major	33,800	24,300	B	2
Telegraph Canyon Road/Rutgers Avenue	Primary Arterial 6	56,300	30,800	A	3
Rutgers Avenue/SR-125	Primary Arterial 6	56,300	31,200	A	3

TABLE 4.2-4
YEAR 2005 (WITH SR-125) STREET SEGMENT OPERATIONS
(continued)

Roadway	Classification	Capacity (LOS D)	Year 2005 ADT	LOS	Project Contribution (%)
Otay Lakes Road (cont.)					
SR-125/EastLake Parkway	Primary Arterial 6	56,300	46,100	C	10
EastLake Parkway/Lane Avenue	Primary Arterial 6	56,300	28,200	A	5
Lane Avenue to Hunte Parkway	Primary Arterial 6	56,300	22,300	A	22
East of Hunte Parkway	Primary Arterial 6	56,300	19,500	A	1
East Palomar Street					
Paseo Ladera/Paseo Ranchero	-	-	-	-	
Paseo Ranchero/La Media Road	Class 1 Collector	24,800	8,700	A	NOM
La Media Road/Olympic Parkway	-	-	-	-	-
Olympic Parkway					
I-805/Medical Center Drive	4-lane Major	33,800	33,500	D	2
Medical Center Drive/Paseo Ranchero	4-lane Major	33,800	27,100	C	3
Paseo Ranchero/La Media Road	4-lane Major	33,800	20,500	A	5
La Media Road/SR-125	4-lane Major	33,800	18,100	A	1
SR-125/EastLake Parkway	4-lane Major	33,800	14,300	A	7
EastLake Parkway/Hunte Parkway	4-lane Major	33,800	8,300	A	29
Hunte Parkway/Wueste Road	4-lane Major	33,800	8,800	A	6
Paseo Ranchero					
East H Street/Telegraph Canyon Road	Class 1 Collector	24,800	8,000	A	1
Telegraph Canyon Road/East Palomar Street	Class 1 Collector	24,800	15,000	A	1
East Palomar Street/Olympic Parkway	Class 1 Collector	24,800	11,700	A	1
Olympic Parkway/Otay Valley Road	-	-	-	-	-

TABLE 4.2-4
YEAR 2005 (WITH SR-125) STREET SEGMENT OPERATIONS
(continued)

Roadway	Classification	Capacity (LOS D)	Year 2005 ADT	LOS	Project Contribution (%)
La Media Road					
Telegraph Canyon Road/East Palomar Street	Primary Arterial 6	56,300	16,200	A	1
East Palomar Street/Olympic Parkway	Primary Arterial 6	56,300	10,600	A	1
Olympic Parkway/Birch Parkway	-	-	-	-	-
Birch Parkway/Rock Mountain Road	-	-	-	-	-
Rock Mountain Road/Otay Valley Road	-	-	-	-	-
EastLake Parkway					
North of Otay Lakes Road	4-lane Major	33,800	22,800	B	2
Otay Lakes Road/Clubhouse Drive	4-lane Major	33,800	23,800	B	5
Clubhouse Drive/Olympic Parkway	4-lane Major	33,800	6,000	A	18
Olympic Parkway/Birch Parkway	-	-	-	-	-
Hunte Parkway					
Proctor Valley Road/Otay Lakes Road	4-lane Major	33,800	9,500	A	9
Otay Lakes Road/Clubhouse Drive	4-lane Major	33,800	14,400	A	50
Clubhouse Drive/Olympic Parkway	4-lane Major	33,800	8,400	A	50
Olympic Parkway/Birch Parkway	-	-	-	-	-
Lane Avenue					
Proctor Valley Road/Otay Lakes Road	Class 1 Collector	24,800	19,400	C	3
Rutgers Avenue					
East H Street/Telegraph Canyon Road	Class 2 Collector	13,500	6,400	A	NOM

NOTE: Capacities based on City of Chula Vista Standards.
EB = eastbound; WB = westbound; LOS = level of service; NOM = nominal; - = does not exist

All intersections in the project area are calculated to operate at LOS D or better during the AM and PM peak hours. The assumed completion of SR-125 greatly improves operations at intersections west of SR-125, as expected.

Several portions of I-805 are calculated to operate at poor levels of service, LOS E or LOS F, in the year 2005, even with SR-125 completed. Levels of service do improve on I-805 with the completion of SR-125. LOS B or better operations are calculated on SR-125 in the year 2005.

The peak hour CMP arterial operations results in the year 2005 (with SR-125) show that East H Street, Telegraph Canyon Road, and Olympic Parkway are calculated to operate at LOS D or better during both the AM and PM peak hours with the completion of SR-125.

The year 2005 (with SR-125) impacts listed above for freeways are not considered direct project impacts, but rather are cumulative impacts pursuant to the city-defined significance thresholds because the project contributes less than 5 percent of the traffic. Mitigation for this cumulative impact includes providing additional lanes on I-805. A detailed description of this mitigation measure is provided in Section 4.2.5 below.

Year 2010 Impacts (with SR-125)

Traffic conditions for 2010 were analyzed with SR-125. Traffic volumes with the project traffic added are shown in Figure 4.2-5 and summarized in Table 4.2-5.

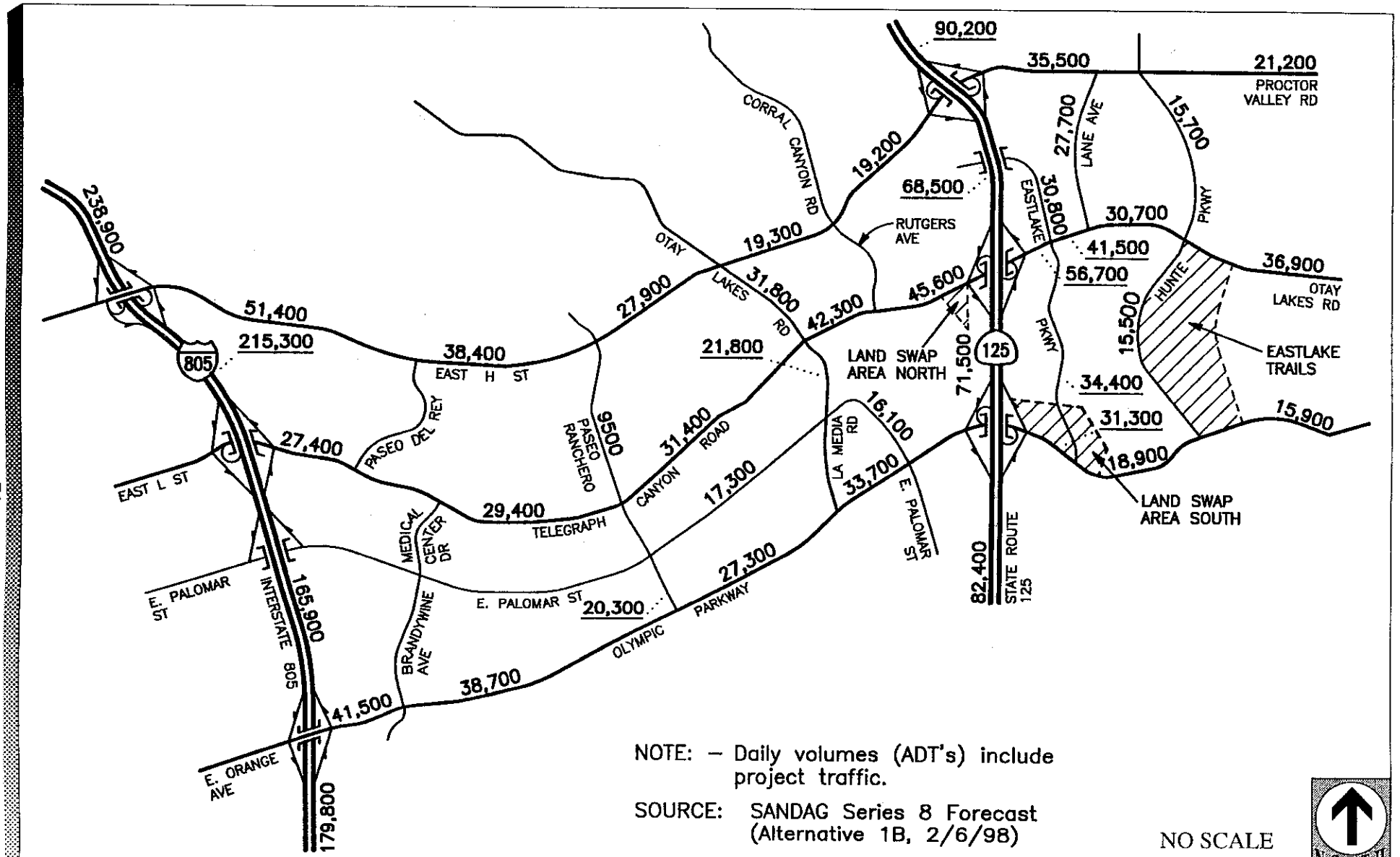
All street segments are calculated to operate at LOS D or better in the Year 2010, except for the following which are considered significant:

- Otay Lakes Road, SR-125 to EastLake Parkway (LOS E)
- EastLake Parkway, Otay Lakes Road to Clubhouse Drive (LOS E)
- Lane Avenue, Proctor Valley Road to Otay Lakes Road (LOS F)

All intersections in the project area are calculated to operate at LOS D or better during the AM and PM peak hours except for the following intersection:

- Otay Lakes Road and Lane Avenue (LOS F, AM and PM peaks)

This intersection impact is considered a direct impact because the project in the year 2010 contributes more than 5 percent of the traffic during the AM and PM peak hour.



Source: Linscott, Law & Greenspan Engineers 1998

FIGURE 4.2-5

Daily Traffic Volumes, Year 2010, with SR-125

RECON

TABLE 4.2-5
YEAR 2010 STREET SEGMENT OPERATIONS

Roadway	Classification	Capacity (LOS D)	Year 2010 ADT	LOS	Project Contribution (%)
East H Street					
I-805 to Terra Nova Drive	Primary Arterial 6	56,300	51,400	D	1
Terra Nova Drive/Paseo del Rey	Primary Arterial 6	56,300	36,600	A	1
Paseo del Rey to Paseo Ranchero	Primary Arterial 6	56,300	38,400	B	2
Paseo Ranchero/Otay Lakes Road	Primary Arterial 6	56,300	27,900	A	3
Otay Lakes Road/Corral Canyon Road	4-lane Major	33,800	19,300	A	2
Corral Canyon Road/EastLake Drive	4-lane Major	33,800	17,700	A	14
EastLake Drive/SR-125	Primary Arterial 6	56,300	19,200	A	13
Proctor Valley Road					
SR-125/Mt. Miguel Road	Primary Arterial 6	56,300	27,700	A	NOM
Mt. Miguel Road/Rancho Janal Drive	Primary Arterial 6	56,300	35,500	A	NOM
Rancho Janal Drive/Hunte Parkway	Primary Arterial 6	56,300	41,200	B	NOM
East of Hunte Parkway	Class 1 Collector	24,800	21,200	C	NOM
Telegraph Canyon Road					
I-805/Paseo del Rey	6-lane Major	45,000	27,400	A	5
Paseo del Rey/Paseo Ladera	Primary Arterial 6	56,300	29,400	A	5
Paseo Ladera/Paseo Ranchero	Primary Arterial 6	56,300	22,200	A	6
Paseo Ranchero/Otay Lakes Road	Primary Arterial 6	56,300	31,400	A	6
Otay Lakes Road					
Bonita Road/Ridgeview Way	4-lane Major	33,800	25,900	B	4
Ridgeview Way/East H Street	4-lane Major	33,800	25,800	B	5
East H Street/Telegraph Canyon Road	4-lane Major	33,800	31,800	D	6
Telegraph Canyon Road/Rutgers Avenue	Primary Arterial 6	56,300	42,300	B	3
Rutgers Avenue/SR-125	Primary Arterial 6	56,300	45,600	C	3

TABLE 4.2-5
YEAR 2010 STREET SEGMENT OPERATIONS
(continued)

Roadway	Classification	Capacity (LOS D)	Year 2010 ADT	LOS	Project Contribution (%)
Otay Lakes Road (cont.)					
SR-125/EastLake Parkway	Primary Arterial 6	56,300	56,700	E	12
EastLake Parkway/Lane Avenue	Primary Arterial 6	56,300	41,500	B	3
Lane Avenue to Hunte Parkway	Primary Arterial 6	56,300	30,700	A	3
East of Hunte Parkway	Primary Arterial 6	56,300	36,900	A	2
East Palomar Street					
Paseo Ladera/Paseo Ranchero	4-lane Major	33,800	11,200	A	NOM
Paseo Ranchero/La Media Road	Class 1 Collector	24,800	17,300	B	NOM
La Media Road/Olympic Parkway	Class 1 Collector	24,800	16,100	A	NOM
Olympic Parkway					
I-805/Medical Center Drive	Primary Arterial 6	56,300	41,500	B	8
Medical Center Drive/Paseo Ranchero	Primary Arterial 6	56,300	38,700	B	9
Paseo Ranchero/La Media Road	Primary Arterial 6	56,300	27,300	A	14
La Media Road/SR-125	Primary Arterial 6	56,300	33,700	A	37
SR-125/EastLake Parkway	Primary Arterial 6	56,300	31,300	A	32
EastLake Parkway/Hunte Parkway	Primary Arterial 6	56,300	18,900	A	16
Hunte Parkway/Wueste Road	4-lane Major	33,800	15,900	A	10
Paseo Ranchero					
East H Street/Telegraph Canyon Road	Class 1 Collector	24,800	9,500	A	1
Telegraph Canyon Road/East Palomar Street	Primary Arterial 6	56,300	18,700	A	1
East Palomar Street/Olympic Parkway	Primary Arterial 6	56,300	20,300	A	1
Olympic Parkway/Otay Valley Road	-	-	-	-	-

TABLE 4.2-5
YEAR 2010 STREET SEGMENT OPERATIONS
(continued)

Roadway	Classification	Capacity (LOS D)	Year 2010 ADT	LOS	Project Contribution (%)
La Media Road					
Telegraph Canyon Road/East Palomar Street	Primary Arterial 6	56,300	21,800	A	12
East Palomar Street/Olympic Parkway	Primary Arterial 6	56,300	7,600	A	8
Olympic Parkway/Birch Parkway	-	-	-	-	-
Birch Parkway/Rock Mountain Road	-	-	-	-	-
Rock Mountain Road/Otay Valley Road	-	-	-	-	-
EastLake Parkway					
North of Otay Lakes Road	4-lane Major	33,800	30,800	D	5
Otay Lakes Road/Clubhouse Drive	4-lane Major	33,800	34,400	E	10
Clubhouse Drive/Olympic Parkway	4-lane Major	33,800	26,000	B	23
Olympic Parkway/Birch Parkway	-	-	-	-	-
Hunte Parkway					
Proctor Valley Road/Otay Lakes Road	4-lane Major	33,800	15,700	A	12
Otay Lakes Road/Clubhouse Drive	4-lane Major	33,800	15,500	A	50
Clubhouse Drive/Olympic Parkway	4-lane Major	33,800	13,800	A	50
Olympic Parkway/Birch Parkway	-	-	-	-	-
Lane Avenue					
Proctor Valley Road/Otay Lakes Road	Class 1 Collector	24,800	27,700	F	4
Rutgers Avenue					
East H Street/Telegraph Canyon Road	Class 2 Collector	13,500	7,500	A	NOM

NOTE: Capacities based on City of Chula Vista Standards. EB = eastbound; WB = westbound.
LOS = Level of Service. NOM = Nominal
* = Does Not Exist.

Several portions of I-805 are calculated to operate at poor levels of service, LOS E or LOS F, in the year 2010. LOS F is calculated on portions of I-805 north of East H Street. SR-125 is calculated to operate at LOS C or better in the year 2010.

The peak hour CMP arterial operations results in the year 2010 show that East H Street, Telegraph Canyon Road, and Olympic Parkway are calculated to operate at LOS D or better during both the AM and PM peak hours.

The direct intersection impact at Otay Lakes Road and Lane Avenue would require additional turn lanes at this intersection.

The year 2010 impacts listed above for street segments and freeways are not considered direct project impacts, but rather are cumulative impacts pursuant to the city-defined significance thresholds as the project contributes less than 5 percent of the traffic or adequate peak hour LOS are calculated at the intersections along the segments. Mitigation for these freeway and street segment cumulative impacts includes providing additional lanes on I-805 and various improvements to Otay Lakes Road, EastLake Parkway, and Lane Avenue. Year 2010 analysis included the half-diamond interchange at I-805 and East Palomar Street. A detailed description of these mitigation measures is provided in Section 4.2.5 below.

Buildout Impacts (with SR-125)

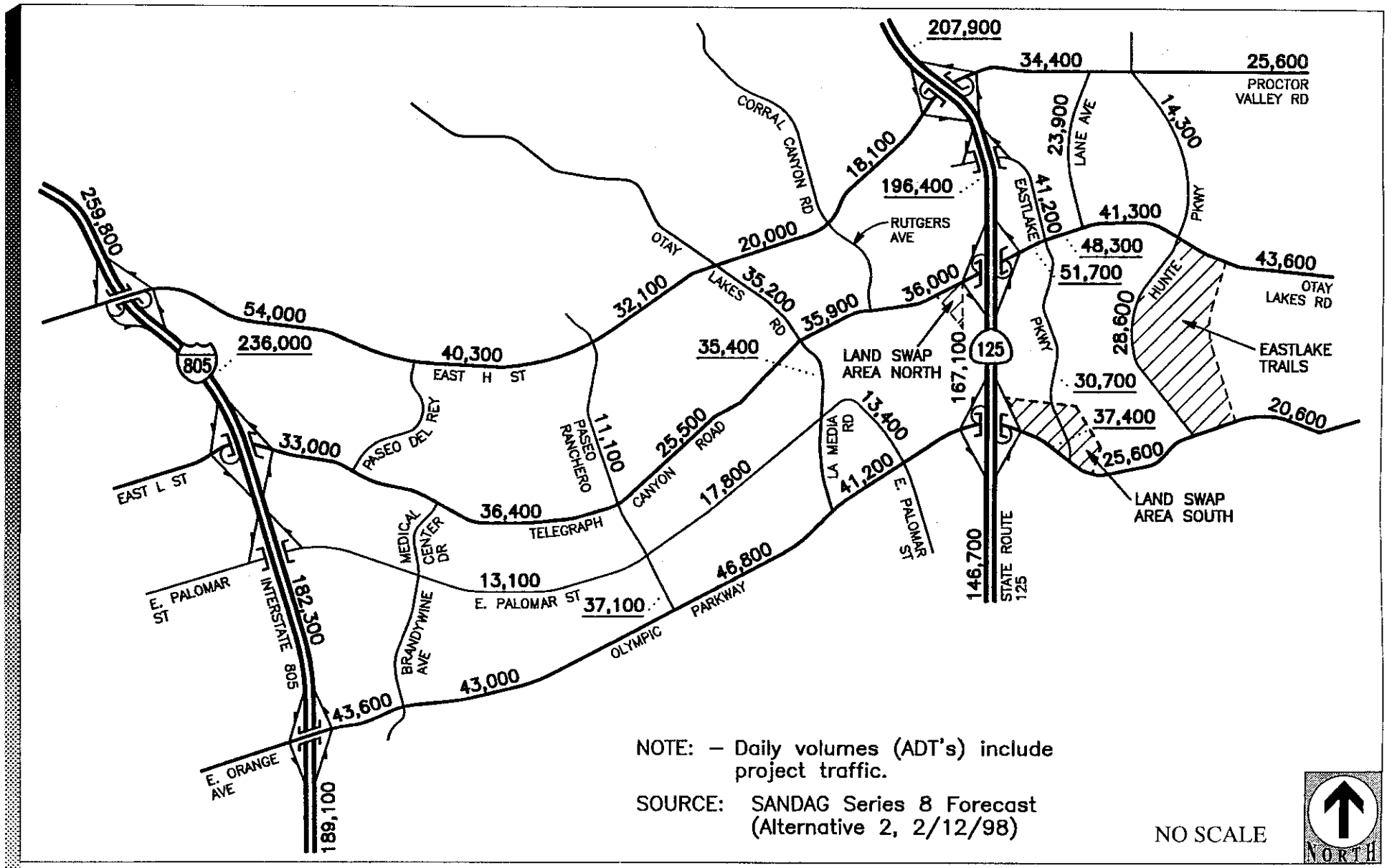
Traffic conditions for buildout were analyzed with SR-125 as a freeway. Traffic volumes with the project traffic added are shown in Figure 4.2-6 and summarized in Table 4.2-6.

The buildout results show that all street segments are calculated to operate at LOS D or better at buildout with the following exceptions:

- EastLake Parkway, North of Otay Lakes Road (LOS F)
- EastLake Parkway, Otay Lakes Road to Clubhouse Drive (LOS E)
- All intersections in the project area are calculated to operate at LOS D or better during the AM and PM peak hours.

Several portions of I-805 are calculated to operate at poor levels of service, LOS E or LOS F, in the buildout conditions. LOS F is calculated on portions of I-805 north of East H Street. SR-125 is calculated to operate at LOS C or better in the buildout conditions.

The buildout impacts listed above for street segments and freeways are not considered direct project impacts, but rather are cumulative impacts pursuant to the city-defined significance thresholds as the project contributes less than 5 percent of the traffic or



Source: Linscott, Law & Greenspan Engineers 1998

FIGURE 4.2-6

Buildout Daily Traffic Volumes with SR-125

RECON

TABLE 4.2-6
BUILDOUT STREET SEGMENT OPERATIONS

Roadway	Classification	Capacity (LOSC)	Buildout ADT	LOS	Project Contribution (%)
East H Street					
I-805 to Terra Nova Drive	Primary Arterial 6	50,000	54,000	D	1
Terra Nova Drive/Paseo del Rey	Primary Arterial 6	50,000	40,600	B	1
Paseo del Rey to Paseo Ranchero	Primary Arterial 6	50,000	40,300	B	1
Paseo Ranchero/Otay Lakes Road	Primary Arterial 6	50,000	32,100	A	1
Otay Lakes Road/Corral Canyon Road	4-lane Major	30,000	20,000	A	1
Corral Canyon Road/EastLake Drive	4-lane Major	30,000	14,800	A	1
EastLake Drive/SR-125	Primary Arterial 6	50,000	18,100	A	3
Proctor Valley Road					
SR-125/Mt. Miguel Road	Primary Arterial 6	50,000	32,300	A	2
Mt. Miguel Road/Rancho Janal Drive	Primary Arterial 6	50,000	34,400	A	2
Rancho Janal Drive/Hunte Parkway	Primary Arterial 6	50,000	41,700	B	1
East of Hunte Parkway	4-lane Major	30,000	25,600	B	2
Telegraph Canyon Road					
I-805/Paseo del Rey	6-lane Major	40,000	33,000	C	1
Paseo del Rey/Paseo Ladera	Primary Arterial 6	50,000	36,400	A	1
Paseo Ladera/Paseo Ranchero	Primary Arterial 6	50,000	24,200	A	1
Paseo Ranchero/Otay Lakes Road	Primary Arterial 6	50,000	25,500	A	4
Otay Lakes Road					
Bonita Road/Ridgeview Way	Primary Arterial 6	50,000	28,500	A	1
Ridgeview Way/East H Street	Primary Arterial 6	50,000	29,400	A	2
East H Street/Telegraph Canyon Road	Primary Arterial 6	50,000	35,200	A	3
Telegraph Canyon Road/Rutgers Avenue	Primary Arterial 6	50,000	35,900	A	3
Rutgers Avenue/SR-125	Primary Arterial 6	50,000	36,000	A	7

TABLE 4.2-6
BUILDOUT STREET SEGMENT OPERATIONS
(continued)

Roadway	Classification	Capacity (LOSC)	Buildout ADT	LOS	Project Contribution (%)
Otay Lakes Road (cont.)					
SR-125/EastLake Parkway	Primary Arterial 6	50,000	51,700	D	5
EastLake Parkway/Lane Avenue	Primary Arterial 6	50,000	48,300	C	10
Lane Avenue to Hunte Parkway	Primary Arterial 6	50,000	41,300	B	12
East of Hunte Parkway	Primary Arterial 6	50,000	43,600	A	3
East Palomar Street					
Paseo Ladera/Paseo Ranchero	4-lane Major	30,000	13,100	A	NOM
Paseo Ranchero/La Media Road	Class 1 Collector	22,000	17,800	B	NOM
La Media Road/Olympic Parkway	Class 1 Collector	22,000	13,400	A	NOM
Olympic Parkway					
I-805/Medical Center Drive	Primary Arterial 6	50,000	43,600	B	4
Medical Center Drive/Paseo Ranchero	Primary Arterial 6	50,000	43,000	B	4
Paseo Ranchero/La Media Road	Primary Arterial 6	50,000	46,800	B	5
La Media Road/SR-125	Primary Arterial 6	50,000	41,200	A	25
SR-125/EastLake Parkway	Primary Arterial 6	50,000	37,400	A	31
EastLake Parkway/Hunte Parkway	Primary Arterial 6	50,000	25,600	A	41
Hunte Parkway/Wueste Road	4-lane Major	30,000	20,600	A	4
Paseo Ranchero					
East H Street/Telegraph Canyon Road	Class 1 Collector	22,000	11,100	A	NOM
Telegraph Canyon Road/East Palomar Street	Primary Arterial 6	50,000	27,100	A	NOM
East Palomar Street/Olympic Parkway	Primary Arterial 6	50,000	37,100	A	NOM
Olympic Parkway/Otay Valley Road	Primary Arterial 6	50,000	34,200	A	NOM

TABLE 4.2-6
BUILDOUT STREET SEGMENT OPERATIONS
(continued)

Roadway	Classification	Capacity (LOSC)	Buildout ADT	LOS	Project Contribution (%)
La Media Road					
Telegraph Canyon Road/East Palomar Street	Primary Arterial 6	50,000	35,400	A	1
East Palomar Street/Olympic Parkway	Primary Arterial 6	50,000	27,600	A	1
Olympic Parkway/Birch Parkway	Primary Arterial 6	50,000	22,900	A	1
Birch Parkway/Rock Mountain Road	Primary Arterial 6	50,000	22,800	A	1
Rock Mountain Road/Otay Valley Road	Primary Arterial 6	50,000	20,800	A	1
EastLake Parkway					
North of Otay Lakes Road	4-lane Major	30,000	41,200	F	17
Otay Lakes Road/Clubhouse Drive	4-lane Major	30,000	37,300	E	14
Clubhouse Drive/Olympic Parkway	6-lane Major	40,000	30,700	B	55
Olympic Parkway/Birch Parkway	6-lane Major	40,000	30,300	B	-
Hunte Parkway					
Proctor Valley Road/Otay Lakes Road	4-lane Major	30,000	14,300	A	3
Otay Lakes Road/Clubhouse Drive	4-lane Major	30,000	25,100	B	30
Clubhouse Drive/Olympic Parkway	~~6~~4-lane Major	~~40~~30,000	28,600	~~C~~A	36
Olympic Parkway/Birch Parkway	Primary Arterial 6	50,000	27,200	A	-
Lane Avenue					
Proctor Valley Road/Otay Lakes Road	Class 1 Collector	22,000	23,900	D	7
Rutgers Avenue					
East H Street/Telegraphy Canyon Road	Class 2 Collector	12,000	7,000	A	NOM

NOTE: Capacities based on City of Chula Vista Standards
EB = eastbound; WB = westbound; LOS = level of service; NOM = nominal
- = does not exist

EastLake Company, response #2

adequate peak hour LOS are calculated at the intersections along the segments. Mitigation for these freeway and street segment cumulative impacts includes providing additional lanes on I-805 and improvements to EastLake Parkway. A detailed description of these mitigation measures is provided in Section 4.2.5 below.

4.2.3 Level of Significance Prior to Mitigation

In order to assess the potential significance of the project impacts, the amount of traffic present at an intersection or street segment which is attributable to the proposed project was determined. The level of significance for the project's direct and cumulative impacts for each scenario was determined using the significance criteria outlined earlier in this section. The project's significant direct and cumulative impacts are described below for street segments, intersections, freeways, and CMP Prime Arterials.

Year 2000 (without SR-125)

Direct Impacts

- No significant direct impacts.

Cumulative Impacts

- Segment of East H Street, I-805 to Terra Nova Drive (LOS E)
- Segment of Telegraph Canyon Road, I-805 to Paseo del Rey (LOS F)
- Intersection of East H Street/I-805 southbound ramps (LOS E, PM peak)
- Intersection of Telegraph Canyon Road/I-805 northbound ramps (LOS F, AM and PM peak)
- Freeway segment of I-805 between East H Street and Bonita Road (LOS E).
- CMP arterial of East H Street (I-805 to Otay Lakes Road)
- CMP arterial of Telegraph Canyon Road (I-805 to Medical Center Drive)

Year 2005 (without SR-125)

Direct Impacts

- No significant direct impacts.

Cumulative Impacts

- Segment of East H Street, I-805 to Terra Nova Drive (LOS E)
- Segment of Otay Lakes Road, East H Street to Telegraph Canyon Road (LOS E)
- Segment of Olympic Parkway, I-805 to Paseo Ranchero (LOS F)
- Freeway segments of I-805
- CMP arterial segments of East H Street near I-805
- CMP arterial segments of Olympic Parkway near I-805

Year 2005 (with SR-125)

Direct Impacts

- No significant direct impacts.

Cumulative Impacts

- Freeway segments of I-805

Year 2010 (with SR-125)

Direct Impacts

- Intersection of Otay Lakes Road and Lane Avenue (LOS F, AM and PM peaks)

Cumulative Impacts

- Segment of Otay Lakes Road, SR-125 to EastLake Parkway (LOS E)
- ~~Segment of EastLake Parkway, Otay Lakes Road to Clubhouse Drive (LOS E)~~
- Segment of Lane Avenue, Proctor Valley Road to Otay Lakes Road (LOS F)
- Freeway segment of I-805 north of East H Street

Buildout Conditions

Direct Impacts

- No significant direct impacts.

Cumulative Impacts

- Segment of EastLake Parkway, North of Otay Lakes Road (LOS F)
- ~~Segment of EastLake Parkway, Otay Lakes Road to Clubhouse Drive (LOS E)~~
- Freeway segments of I-805

4.2.4 Mitigation Measures

The transportation improvements presented below are also described in the proposed Public Facilities Financing Plans (PFFPs) for the EastLake Trails and EastLake Greens SPAs. For each of the project scenarios (i.e., Years 2000, 2005, 2010, and Buildout), the PFFPs describe the transportation development impact fees based on equivalent dwelling units (EDUs) by project phase. The proposed PFFPs identify the development impact fees that the applicant needs to pay to mitigate impacts, the estimated cost of the facility, and the applicant's obligation to construct and/or pay for the necessary mitigation. The mitigation described for the project's direct impacts (i.e., Year 2010 only) would be implemented by the project applicant. The mitigation identified for the project's cumulative impacts would consist of the project applicant making fair-share contributions. Payment of the fees would be required at the time building permits are issued.

Year 2000 (without SR-125)

The following mitigation measures would reduce cumulative impacts for street segments and intersections for the year 2000 without SR-125:

~~4.2.4.1 Provide a fourth eastbound through lane and a third northbound right-turn lane, as planned by the City in the future, at the East H Street and I-805 southbound ramps intersection.~~

4.2.4.1~~4.2.4.2~~ Extend Olympic Parkway eastward to Hunte Parkway~~Paseo Ranchero or beyond~~. The LOS improvement at the Telegraph Canyon Road/I-805 (LOS F to LOS C) southbound ramps intersection between years 2000 and 2005 is principally due to the Olympic Parkway construction.

Chula Vista Public Works, response #1

~~4.2.4.3 Extend Olympic Parkway eastward to Hunte Parkway.~~

4.2.4.2~~4.2.4.4~~ Continued freeway planning efforts and deficiency planning by Caltrans and SANDAG to determine acceptable mitigation strategies for the regional freeway system. ~~Such improvements may require additional lanes on I-805~~The City of Chula Vista is willing to review and consider participating in a regional deficiency plan as developed and approved by SANDAG, Caltrans, and all other local jurisdictions.

EastLake Company, response #2

Year 2005 (without SR-125)

The following mitigation measures would reduce cumulative impacts for street segments and intersections for the year 2005 without SR-125:

4.2.4.3~~4.2.4.5~~ Construct SR-125 as a toll road, which would mitigate the segment impact on East H Street.

4.2.4.4~~6~~ Improve Otay Lakes Road to six-lane Major street standards between East H Street and Telegraph Canyon Road if SR-125 is not constructed, is not under construction, or construction is not imminent. For purposes of this mitigation measure, "imminent" shall mean approved and funded.~~or construct SR-125. The construction of SR-125 decreases forecasted volumes on Otay Lakes Road.~~

4.2.4.5~~7~~ Improve Olympic Parkway between I-805 and Paseo Ranchero to Prime Arterial standards.

4.2.4.6~~8~~ Continued freeway planning efforts and deficiency planning by Caltrans and SANDAG to determine acceptable mitigation strategies for the regional freeway system. ~~Such improvements may require additional lanes on I-805~~ The City of Chula Vista is willing to review and consider participating in a regional deficiency plan as developed and approved by SANDAG, Caltrans, and all other local jurisdictions.

Year 2005 (with SR-125)

The following mitigation measures would reduce cumulative impacts for freeways for the year 2005~~0~~ without SR-125:

4.2.4.7~~9~~ Continued freeway planning efforts and deficiency planning by Caltrans and SANDAG to determine acceptable mitigation strategies for the regional freeway system. The City of Chula Vista is willing to review and consider participating in a regional deficiency plan as developed and approved by

SANDAG, Caltrans, and all other local jurisdictions. ~~Such improvements may require additional lanes on I-805~~

Year 2010 (with SR-125)

The following mitigation measures would reduce the direct and cumulative impacts for intersections, street segments, and freeways for the year 2010:

Direct

~~4.2.4.10 Improve Otay Lakes Road (SR-125 to EastLake Parkway to eight lanes).~~

~~4.2.4.11 Improve Otay Lakes Road east of Hunte Parkway to Prime Arterial standards.~~

EastLake Company, response #1

4.2.4.8 Improve the intersection of Otay Lakes Road and Lane Avenue prior to the issuance of the first building permit for the southern "Land Swap" parcel. Improvements include a second eastbound to northbound left-turn lane on Otay Lakes Road and a second southbound to westbound right-turn lane on Lane Avenue.~~Provide a second eastbound left-turn lane and a second southbound right-turn lane at the Otay lakes Road and Lane Avenue intersection.~~

Indirect

~~4.2.4.12 Improve EastLake Parkway (Otay Lakes Road to Clubhouse Drive) to Six-Lane Major Street standards.~~

Chula Vista Public Works, response #1

4.2.4.9~~13~~ Improve Lane Avenue between Proctor Valley Road and Otay Lakes Road to four-lane Major street standards.

4.2.4.10 Improve Otay Lakes Road (SR-125 to EastLake Parkway) to eight lanes.

~~4.2.4.14 Provide a second eastbound left-turn lane and a second southbound right-turn lane at the Otay Lakes Road and Lane Avenue intersection.~~

4.2.4.11~~25~~ Continued freeway planning efforts and deficiency planning by Caltrans and SANDAG to determine acceptable mitigation strategies for the regional freeway system. The City of Chula Vista is willing to review and consider participating in a regional deficiency plan as developed and approved by SANDAG, Caltrans, and all other local jurisdictions. ~~Such improvements may require additional lanes on I-805~~

Buildout Conditions

The following mitigation measures would reduce cumulative impacts for street segments under buildout conditions:

4.2.4.1~~2~~36 Improve EastLake Parkway between ~~north of~~ Otay Lakes Road and SR-125~~Clubhouse Drive~~ to six-lane Major street standards.

Chula Vista Public Works response #2

4.2.4.13 Continued freeway planning by Caltrans and SANDAG to determine acceptable mitigation strategies for the regional freeway system. The City of Chula Vista is willing to review and consider participating in a regional deficiency plan as developed and approved by SANDAG, Caltrans, and all other local jurisdictions. ~~Such improvements may require additional lanes on I-805.~~

4.2.5 Level of Significance After Mitigation

There is one direct project impact identified at the Otay Lakes Road and Lane Avenue intersection. This direct impact would be reduced to a level less than significant with the proposed circulation improvements.

Several cumulative significant impacts were identified due to forecasted volumes exceeding the capacity of intersections, street segments, and freeways in the project area. Circulation improvements were proposed to reduce these impacts. The cumulative impacts to street segments and intersections for 2000, 2005 (with and without SR-125), and 2010 would be reduced to a level less than significant with the proposed circulation improvements. However, ~~at buildout~~ the significant freeway cumulative impacts would not be mitigable to below a level of significance. It should be noted that some of the improvements, such as the near-term widening of I-805, may be infeasible due to funding constraints. Therefore, the cumulative impacts to freeway segments would not be fully mitigated.

4.3 Biological Resources

Biological surveys of the entire EastLake property were completed in February 1982 by WESTEC in conjunction with the Final EIR for the EastLake Master Plan (EIR 81-03). The project site was also a component of the July 1988 EIR (EIR 86-4) for the EastLake Greens and EastLake Trails prezone and annexation. The southern portion of Salt Creek was surveyed by RECON in 1992 in conjunction with the extension of Orange Avenue (referred to in this SEIR as Olympic Parkway) along the southern project boundary. These earlier studies are incorporated by reference into this analysis.

In addition, a biological field check of the project site, a wetland delineation for the Salt Creek drainage (Appendix C), an Otay tarplant (*Hemizonia conjugens*) survey, and a quino checkerspot butterfly (*Euphydryas editha quino*) survey were completed in 1998 by RECON. Surveys were also completed for the burrowing owl, San Diego black-tailed jackrabbit, and San Diego woodrat and the results of these surveys are included in the biology technical appendixes.

RCC, response #1

Biological surveys of the "Land Swap" parcels, which were part of the Otay Ranch property, were completed by RECON in October 1989 and by Ogden in July 1992. These surveys and reports were included in the Otay Ranch Final EIR and are also incorporated by reference into this analysis.

This section describes the general distribution of the plants and animals found within the project area with particular attention given to significant biological features. This analysis also addresses any biological impacts that could occur as a result of the project and mitigation measures for those impacts.

4.3.1 Existing Conditions

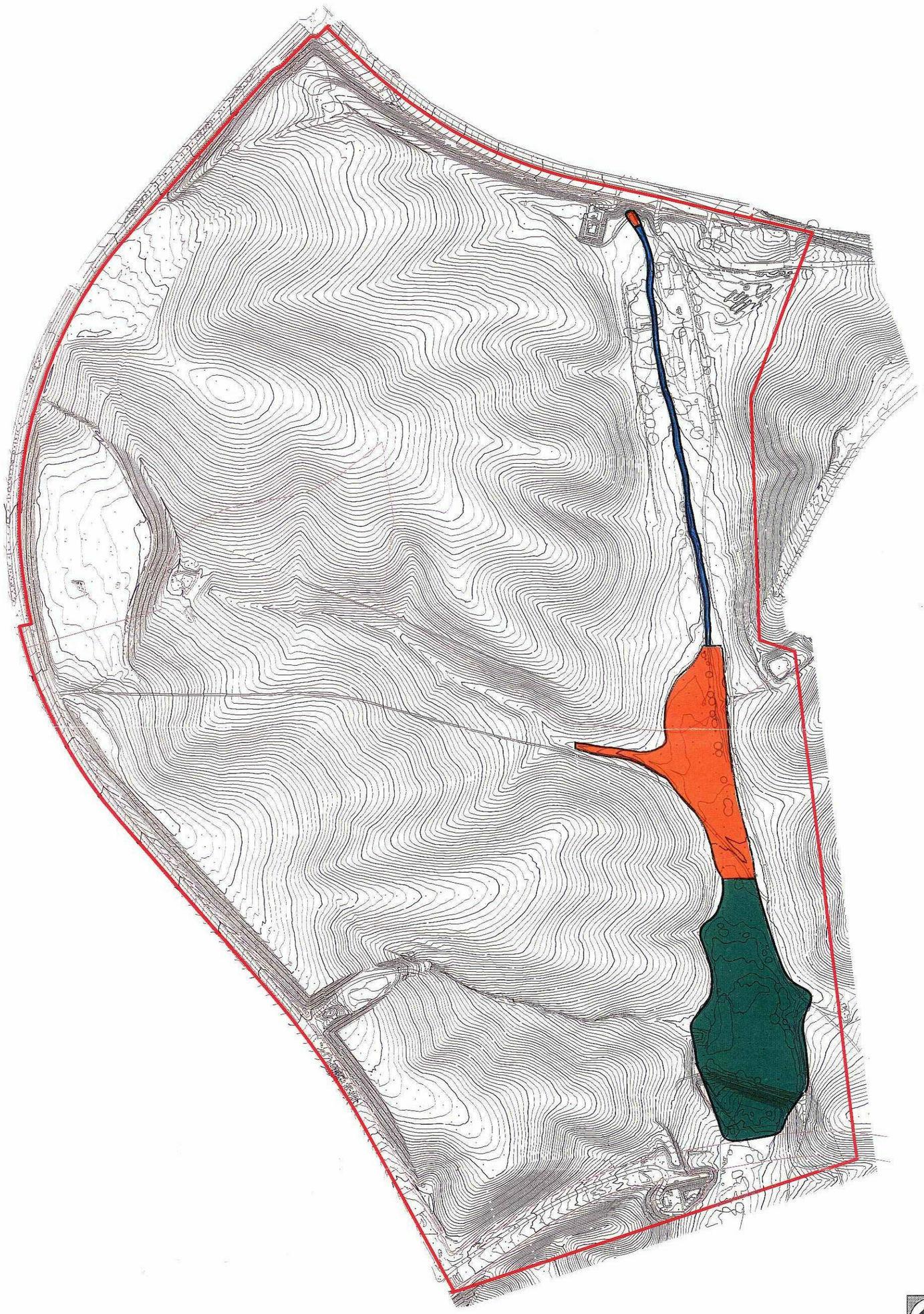
Vegetation

EastLake Trails

The majority of the Trails project area has been previously used for agriculture, primarily barley production which is the dominant vegetation community currently on the site. Ruderal (weedy vegetation) also occurs in small locations along the existing roads that border the site. Other habitats that occur on-site within the Salt Creek corridor include ruderal (weedy) vegetation, tamarisk scrub, fresh water marsh, disturbed fresh water marsh, and disturbed riparian habitat. A representative list of plant species observed by WESTEC in 1982 and during the field check by RECON in 1998 within the Salt Creek drainage is given in Table 4.3-1. The vegetative conditions have changed little during this time frame because of the continued agricultural use of the property. Figure 4.3-1 shows the vegetation communities on the Trails project site.

TABLE 4.3-1
PLANT SPECIES OBSERVED ALONG THE SALT CREEK DRAINAGE OF THE EASTLAKE TRAILS PROPERTY

Scientific Name	Common Name
Salix sp.	Willow
Marubium vulgare	Horehound
Brassica nigra	Black mustard
Rumex crispus	Curly dock
Baccharis salicifolia	Mule fat
Tamarix sp.	Tamarisk
Eucalyptus sp.	Eucalyptus
Baccharis sarothroides	Broom baccharis
Juncus acutus	Spiny rush
Distichlis spicata	Saltgrass
Bromus diandrus	Ripgut grass
Polypogon monspeliensis	Rabbitfoot grass
Isocoma menziesii	San Diego goldenbush
Heliotropium curassavicum	Chinese pusley
Foeniculum vulgare	Sweet fennel
Urtica wrens	Dwarf nettle
Typha sp.	Cattail
Xanthium strumarium	Cocklebur
Washingtonia filifera	Date palm



900 450 FEET 0

NORTH

Jurisdictional wetlands

Non-wetland jurisdictional waters

Agricultural

Approved wetland mitigation area for Olympic Parkway improvements

FIGURE 4.3-1

Existing EastLake Trails Vegetation

RECON

Ruderal habitat is indicative of disturbed areas and is found along roads, the borders of cultivated zones, and around the Fenton Ranch, in the northeast corner of the Trails site. Vegetative elements associated with these areas are ornamental species and weedy adventitious species. Ornamental non-native cultivated trees include eucalyptus, peppers, silk oaks, palms, and olive. Eucalyptus (*Eucalyptus* sp.), California pepper (*Schinus molle*), and olive (*Olea europa*) line Otay Lakes Road. Weedy ruderal species consist mostly of introduced forbs and grasses.

EastLake Trails Salt Creek Corridor

Salt Creek runs north-south along the eastern boundary of the EastLake Trails project site. Within the entire Salt Creek corridor, willow wetland vegetation and stream course occur which total approximately 10.66 acres. The characteristics of northern and southern portions of Salt Creek are described separately below because of the differences in vegetation communities. Figure 4.3-1 shows the wetland vegetation within the Salt Creek corridor.

Salt Creek-Southern Portion

Within the southern portion of Salt Creek, the wetland habitat (i.e., disturbed riparian and disturbed freshwater marsh habitat) is separated from the tamarisk scrub and freshwater marsh to the south by an earthen dam. A pond estimated at 1.5 acres is located north of the existing earthen dam (Figure 4.3-2). The pond is dry during the summer months but fills during the winter months. Dock (*Rumex crispus*), sweet fennel (*Foeniculum vulgare*), and black mustard (*Brassica nigra*) have been found in the disturbed pond area. The north face of the earthen dam is dominated by mule fat (*Baccharis glutinosa*). The south face of the earthen dam is dominated by dried mustard. Immediately south of the dam is a freshwater marsh (approximately one-half acre) dominated by spiny rush (*Scirpus acutus*) and saltgrass (*Distichlis spicata*). Large willow trees representing a disturbed riparian woodland surround the disturbed freshwater marsh. Spiny rush continues south to a dense stand of tamarisk scrub, which consists almost exclusively of tamarisk (*Tamarix* spp.), a non-native weedy shrub that often invades after native vegetation has been cleared. This scrub usually occurs on sandy or gravelly braided washes or along intermittent streams, often in saline areas. Tamarisk is a lavish user of water and a prolific seeder, and is an aggressive competitor in disturbed riparian corridors (Holland 1986). Some Phoenix palms exist among the tamarisk. This habitat extends down Salt Creek south and off-site. There is no natural habitat buffer around this wetland complex.

The existing conditions associated with the southern portion of Salt Creek also includes an approved 404 Permit (Nationwide Permit NW26) Authorization from the U.S. Army Corps of Engineers for impacts to Salt Creek wetland associated with the approved extension of Olympic Parkway. The approved Nationwide Permit (September 10, 1997)

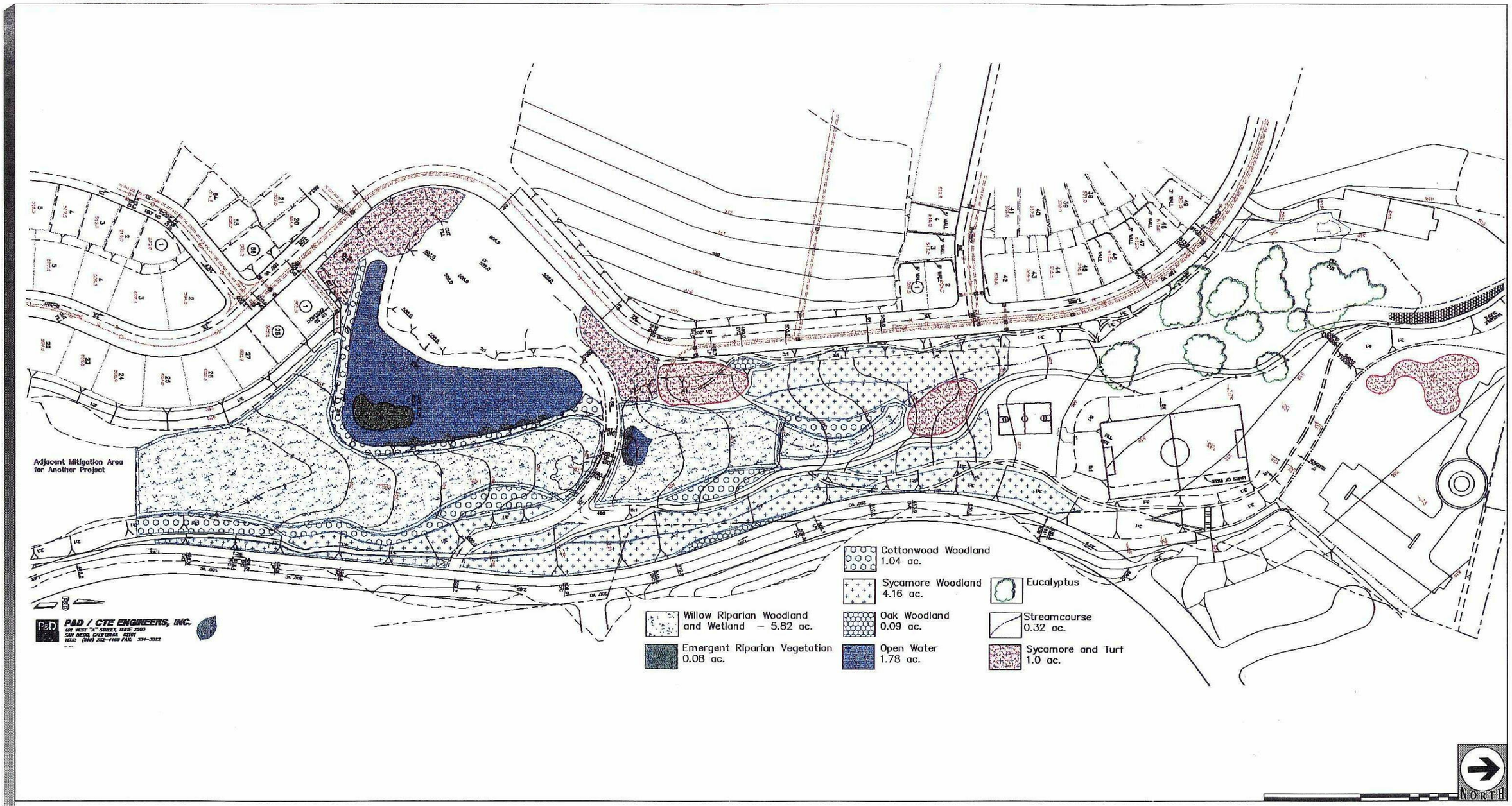


FIGURE 4.3-2

Salt Creek Corridor
Conceptual Mitigation Plan

for the construction of Olympic Parkway across Salt Creek at the southern project boundary would result in the discharge of approximately 61,000 cubic yards of fill into 1.96 acres of wetlands. The permit allows impacts to a maximum of 1.96 acres of the Salt Creek wetlands and requires mitigation for those impacts. This area is a mitigation site for the impacts associated within the road construction. The mitigation includes creating 2.2 acres of high-quality southern willow scrub wetland, and enhancing 2.7 acres of existing wetland. The approved mitigation location for the creation of 2.2 acres of wetlands, and enhancement of 2.7 acres of existing wetlands is around the pond area below the earthen dam.

Salt Creek – Northern Portion

Within the northern half of Salt Creek on the EastLake Trails site, wetland vegetation including cattail (*Typha sp.*), willow (*Salix sp.*), and California bulrush (*Scirpus californicus*) occur primarily in the spill way at the Otay Lakes Road junction. Water collects in this basin, which temporarily slows the velocity of the stream and allows wetland vegetation to be established in this area. Areas found along the stream banks and terraces are not dominated by hydrophytic vegetation. Vegetation along the terraces included tumbleweed (*Salsola tragus*), mustard (*Brassica nigra*), fennel (*Foeniculum vulgare*), and saltbush (*Atriplex* sp.), all upland species. Salt Creek drainage within the project area conveys flows annually.

The area within the spillway adjacent to Otay Lakes Road is considered a wetland (see Figure 4.3-1). This area is approximately 1,650 square feet. The remainder of the northern portion of the Salt Creek channel is considered to be non-wetland jurisdictional waters of the U.S. (see Figure 4.3-2). The average channel width is approximately 16 feet and the channel length is approximately 1,900 feet. The total area of wetland and non-wetland jurisdictional waters within the northern portion of Salt Creek is approximately 30,300 square feet or 0.70 acre.

"Land Swap" Parcels

The vegetation on the "Land Swap" parcels is entirely agricultural and no other vegetation type occurs on the property (Ogden 1992).

Sensitive Plant Species

The EastLake Trails and "Land Swap" property was surveyed for the Otay tarplant (*Hemizonia conjugens*) which has been known to occur in the project vicinity. No Otay tarplants were found on the project site. No other plant species observed on the Trails or "Land Swap" parcels during the biological surveys are currently listed as sensitive, endangered, or threatened by the U.S. Fish and Wildlife Service, California Department

of Fish and Game, or the California Native Plant Society. There were no sensitive plant species observed on the "Land Swap" parcels during the 1992 survey by Ogden.

Wildlife

The project area, including areas to the north, east, and south, are open space used primarily for agricultural purposes and are relatively free of protective cover for much of the year. Because of the lack of protective cover, the number of wildlife species in the area is limited.

Mammals

During previous surveys of the entire EastLake project area which included the project sites (EastLake Trails and "Land Swap" parcels) several mammal species were observed. These include the common desert cottontail (*Sylvilagus audubonii*), common black-tailed jack rabbit (*Lepus californicus*), coyote (*Canis latrans*), Botta's pocket gopher (*Thomomys bottae*), woodrat (*Neotoma* sp.), and gray fox (*Urocyon cinereoargenteus*). Other common species such as striped skunk (*Mephitis mephitis*), spotted skunk (*Spilogale putoris*), raccoon (*Procyon lotor*), long-tailed weasel (*Mustela frenata*), bobcat (*Felis rufus*), and Virginia opossum (*Didelphis virginiana*) would be expected in the general area. No sensitive or endangered species are expected to use the Eastlake Trails or "Land Swap" parcels. As noted above, surveys were also completed for the San Diego black-tailed jackrabbit and San Diego woodrat. These species were not observed during the surveys.

RCC, response #1

Amphibians and Reptiles

Based on the previous surveys of the project site and the current field check of the property, reptiles observed either on the entire EastLake property or on adjacent habitat during the WESTEC biological survey (1982) include the western fence lizard (*Sceloporus occidentalis*), coastal rosy boa (*Lichanura trivirgata* ssp. *roseofusca*), common kingsnake (*Lampropeltis getulus* ssp. *californiae*), red diamond rattlesnake (*Crotalus ruber* ssp. *ruber*), San Diego gopher snake (*Pituophis melanoleucus* ssp. *annectens*), and San Diego horned lizard (*Phrynosoma coronatum* ssp. *blainvillei*). The presence of water in the Salt Creek catch basins may attract a variety of toads and frogs during the spring. The Pacific tree frog (*Hyla regilla*) was observed in the pond area of the Salt Creek drainage during the 1998 RECON field check. No rare, endangered, or threatened species were detected on-site nor are expected to use the site.

Birds

Based on the previous surveys of the project site and the current field check of the property, several bird species have been observed on the project site. A representative list

of these species is included in Table 4.3-2. Mourning dove (*Zenaida macroura*), Cassin's kingbird (*Tyrannus vociferus*), European starling (*Sturnus vulgaris*), loggerhead shrike (*Lanius ludovianus*), northern mockingbird (*Mimus polyglottos*), common raven (*Corvus corax*), and Brewer's blackbird (*Euphagus cyanocephalus*) were the observed species found within the cultivated, disturbed habitats or open habitats in the original surveys. These species would continue to use the site given the continued agricultural use which has remained active on the site.

Other species observed in the general vicinity of Salt Creek include California quail (*Lophortyx californicus*), brown towhee (*Pipilo fuscus*), black phoebe (*Sayornis nigricans*), California thrasher (*Toxostoma redivirum*), Costa's hummingbird (*Calypte costae*), Bewick's wren (*Thryomanes bewickii*), cliff swallow (*Patrochelidon pyrrhonota*), wrentit (*Chamaea fasciata*), blue grosbeak (Guiraca caerulea), red-winged blackbird (Agelaius phoeniceus), American kestrel (*Falco sparverius*), and red-tailed hawk (*Buteo jamaicensis*). These species tend to be found in native low scrub habitat. Since the sites lack native low scrub vegetation, these species are not expected to be found on the majority of the Trails and "Land Swap" parcels; however, these species may utilize the Salt Creek drainage area.

Several waterfowl species were observed in or around the pond along the Salt Creek drainage during the 1992 RECON survey and 1998 RECON field check. These species include bufflehead (*Bucephala albeola*), ruddy duck (*Oxyura jamaicensis rubida*), western grebe (*Aechmophorus occidentalis*), mallard (*Anas platyrhynchos platyrhnychos*), and the American coot (*Fulica americana americana*). In addition, the California gnatcatcher has been observed off-site within coastal sage scrub habitat on the Otay Ranch project site immediately south of Olympic Parkway. Gnatcatcher habitat also exists within the off-site EastLake III project area near the Olympic Training Center. Coastal sage scrub does not occur on the project site. As noted above, surveys were also completed for the burrowing owl and no species were observed.

RCC, response #1

Invertebrates

The project site was assessed and surveyed by RECON for the quino checkerspot butterfly (*Euphydryas editha quino*) in the spring 1998 in accordance with the adopted U.S. Fish and Wildlife Service protocol. No quino checkerspot butterflies were observed during the surveys. Reports documenting the results of the surveys are included as an appendix to this EIR.

Multiple Species Conservation Program (MSCP) and the City of Chula Vista Subarea Plan

The MSCP is designed to identify lands that would conserve habitat for federal and state endangered, threatened, or sensitive species, including the federally listed threatened

TABLE 4.3-2
BIRD SPECIES IDENTIFIED ALONG SALT CREEK

Scientific Name	Common Name
Falco sparverius	American kestrel
Buteo jamaicensis	Red-tailed hawk
Lephortyx californicus	California quail
Zenaidura macroura	Mourning dove
Calypte costae	Costa's hummingbird
Sayornis nigricans	Black phoebe
Tyrannus vociferans	Cassin's kingbird
Lanius ludovicianus	Loggerhead shrike
Corvus corax	Common raven
Mimus polyglottus	Northern mockingbird
Toxostoma redivivum	California thrasher
Sturnus vulgaris	European starling
Thryomanes bewickii	Bewick's wren
Petrochelidon pyrrhonota	Cliff swallow
Chamaea fasciata	Wrentit
Guiraca caerulea	Blue grosbeak
Pipilo fuscus	Brown towhee
Agelaius phoeniceus	Red-winged blackbird
Euphages cyanocephalus	Brewer's blackbird
Bucephala albeola	Bufflehead
Oxyura jamaicensis rubida	Ruddy duck
Aechmophorus occidentalis	Western grebe
Anasplatyrhynchos platyrhynchos	Mallard
Fulica americana americana	American coot

California gnatcatcher. The MSCP has been determined to be the equivalent of a Natural Community Conservation Plan for the area. The MSCP is a plan and process for the local issuance of permits under the federal and state Endangered Species Acts for impacts to threatened and endangered species.

A final joint federal environmental impact statement and state EIR was released in January 1997 on the MSCP Plan and the MSCP was adopted by the City of San Diego in March 1997. The MSCP includes the compilation of information related to vegetation, land use, and generalized land ownership mapping and the preparation of biological standards and guidelines, a habitat evaluation model, and an analysis of the acreage necessary for a viable preserve system. The MSCP Plan also includes an implementation strategy, preserve design, and management guidelines. When adopted by local jurisdictions and approved by the U.S. Fish and Wildlife Service and California Department of Fish and Game, a final MSCP plan and report will be prepared.

Using the MSCP Plan as a framework plan, subarea plans may be prepared by local general-purpose agencies. The City of Chula Vista has prepared a draft Subarea Plan to guide implementation of the MSCP Plan within its corporate boundaries. The City of Chula Vista Subarea Plan has not been adopted by the City Council.

The City's MSCP Subarea Plan boundary is generally represented by the City's General Planning boundary. The EastLake Trails property and the "Land Swap" parcels are located outside the Multi-Habitat Planning Area (MHPA) boundaries. However, the southern boundary of the Trails property, along the Salt Creek drainage, is adjacent to the MHPA boundary.

In addition the City's Draft Subarea Plan, Section 4.1.1.8 outlines specific mitigation measures applicable to the overall EastLake project area. These include retention of coastal sage scrub, ponds, and vernal pools as open space by Homeowners Associations to assure the long-term maintenance of preserve areas (City of Chula Vista 1996). Also, pursuant to Table 3 within the Draft Subarea Plan, no mitigation would be required for impacts to disturbed and agricultural lands.

4.3.2 Impacts

With the exception of vegetation in the Salt Creek Corridor, the EastLake Trails site was previously farmed for barley production and was, at times, fallow farmland. However, it is currently being farmed for oat production, primarily to be harvested for cattle feed and hay. The "Land Swap" parcels are currently fallow agricultural land and have been used for barley production in the past. Because of previous and ongoing agricultural use, significant vegetative habitat and associated biological resources are absent from the sites. Past biological surveys concluded that potential biological impacts for the

EastLake Trails project site, except for the Salt Creek area, were not considered significant.

The proposed EastLake Trails development would impact the Salt Creek drainage. Based on the conceptual grading plan for the Salt Creek Park, the project would directly impact approximately 6.0 acres of willow wetland and non-wetland jurisdictional waters, and would require mitigation measures to reduce the impacts.

4.3.3 Level of Significance Prior to Mitigation

Within the EastLake Trails project area, construction and grading associated with the Salt Creek linear park and other land uses would directly impact willow wetland and non-wetland jurisdictional waters within the northern portion of Salt Creek wetland area, and is considered a significant impact. The impacts to agricultural lands within the remainder of the EastLake Trails site and the "Land Swap" parcels are not considered a significant impact.

4.3.4 Mitigation Measures

Mitigation for willow wetland and non-wetland jurisdictional waters impacts would be required by the City of Chula Vista. Table 4.3-3 shows the proposed enhancement and creation mitigation ratio of approximately 2:1 for the impacts associated with the grading for the Salt Creek Linear Park. Figure 4.3-2 shows a conceptual mitigation plan within the Salt Creek corridor for the impacts to wetland and non-wetland jurisdictional waters. As described below, approval of a mitigation plan by the City of Chula Vista which would also be subject to the approval by state and federal wildlife agencies as part of the 1603 Streambed Alteration and Section 404 permitting process, would be required at the time a tentative map is processed.

The goal of the required wetland mitigation plan would be to produce a wetland/riparian habitat which functions better and has higher value than the current habitat on the site. For the created habitat, the target functions and values would be set at a moderate level for wetlands and moderate to high for the actual stream course. It is expected that these values will be exceeded over time, but the achievement of these values will be an improvement over the existing conditions.

Mitigation for the Salt Creek wetland impacts include the following:

4.3.4-1 Conditions of approval at the time a tentative map is processed for the EastLake Trails project site would require the preparation and approval of a detailed mitigation plan for the creation and enhancement of riparian vegetation within the Salt Creek Corridor. The mitigation plan shall include components addressing performance standards, maintenance requirements

TABLE 4.3-3
SALT CREEK PARK IMPACTS AND MITIGATION

Type	Willow/ Wetland	Streamcourse	~~Open Water~~	Sycamore Cottonwood	Oak Woodland	Total
Impacted	5.7	0.3	~~0~~	0	0	6.0
Created	5.82	0.3	~~1.78~~	5.20	0.09	Wet/Riparian 6.12~~11.32~~ All Habitat 11.41~~12.92~~
Net	+0.12	0	~~+1.78~~	5.20	0.09	+5.41~~6.27~~

CDFG, response #3

(e.g., pest control, weeding, and plant replacement), and monitoring and report preparation.

4.3.4-2 Prior to the issuance of a grading permit, the project applicant shall be required to obtain state (1603 Streambed Alteration Agreement) and federal (Section 404 Clean Water Act) permits.

4.3.5 Level of Significance After Mitigation

The above mitigation measures would reduce the impact to below a level of significance.

4.4 Hydrology/Drainage

4.4.1 Existing Conditions

The following discussion on hydrology and water quality is based on technical reports prepared for the proposed project. These reports include the Preliminary Drainage Study for EastLake Trails (P&D/CTE Engineers), Preliminary Drainage Study for the "Land Swap" Parcels (The May Group), and the Detention Study and Addendum of Salt Creek at Orange Avenue (Rick Engineering). The technical reports are included as Appendixes D, E, and F, respectively, to the draft EIR.

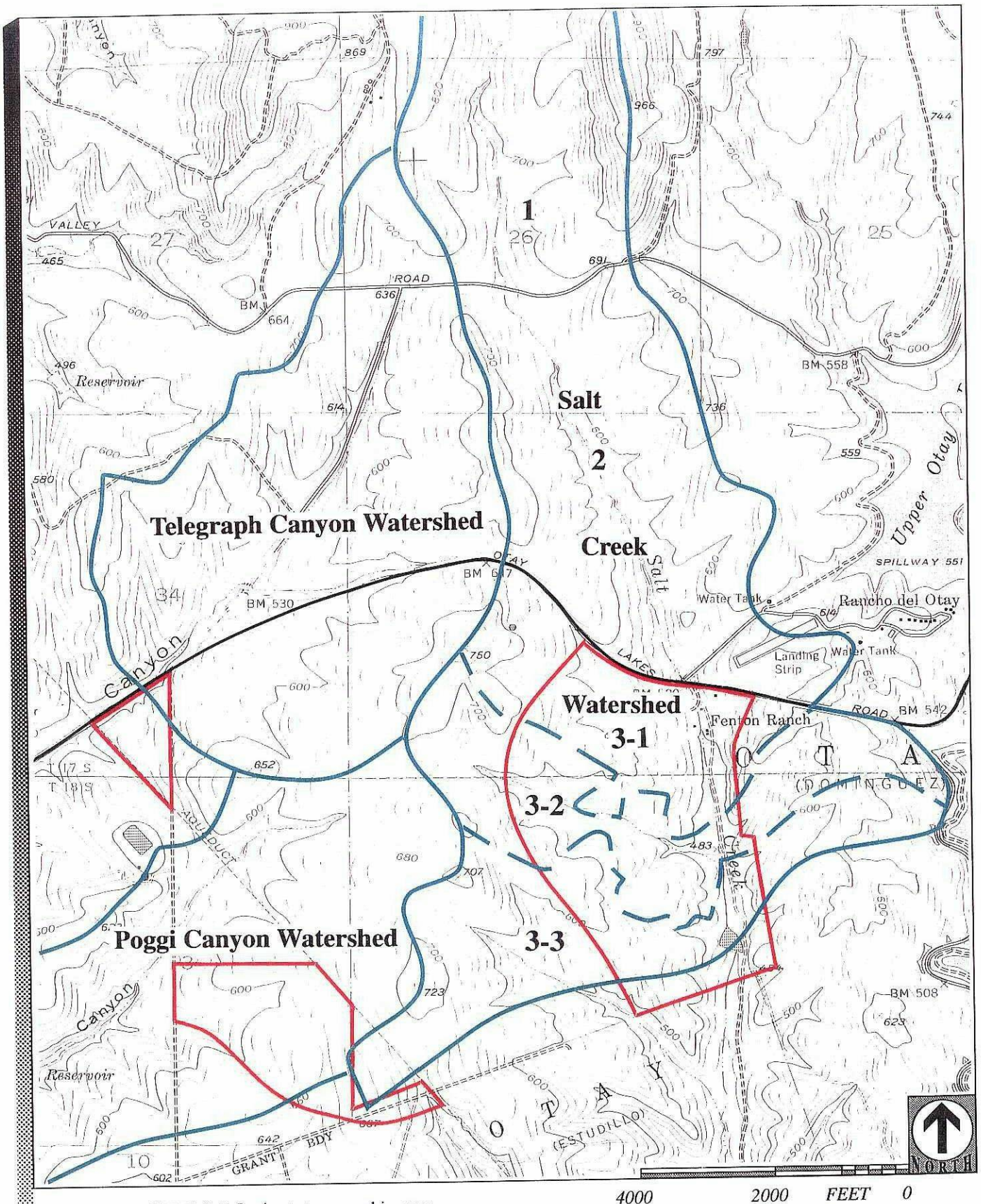
Hydrology

The EastLake Trails site and the "Land Swap" parcels are located within the Otay River Watershed. Surface waters within the Trails project area drain southeast into Salt Creek, a tributary to the Otay River. Surface waters on the "Land Swap" parcels drain north into Telegraph Canyon Basin and southwest into Poggi Canyon Basin. The drainage basin boundaries are shown on Figure 4.4-1. Poggi Canyon and Salt Creek drain into the Otay River, located south of the site. Telegraph Canyon Basin drains directly into San Diego Bay.

The project area is not in a flood prone area, however, downstream areas of Telegraph Canyon and the Otay River are prone to flooding. The EastLake Trails and "Land Swap" project sites are located within Zones 3 and 4 of the San Diego Flood Control District. Both zones have comprehensive plans for flood control and drainage and are under the direction of the Flood Control District. The comprehensive plans for both zones assumed open space/agricultural uses in the project area, thus no major flood control facilities exist. No major flood control facilities are proposed within the Trails or "Land Swap" project areas (City of Chula Vista 1989b).

For the Trails portion of the project, surface runoff for the 10-, 50- and 100-year storm of six-hour duration within the Salt Creek watershed was estimated by using the U.S. Army Corps of Engineers' HEC-1 computer model. The Salt Creek watershed is divided into the subbasins as shown in Figure 4.4-1. The Trails site is located within subbasin 3. Table 4.4-1 provides a summary of subbasin areas and estimated discharges at the locations shown on the HEC-1 drainage map. For the Trails site, the existing discharges for the 10-, 50- and 100-year storms are 430 cubic feet per second (cfs), 780 cfs, and 900 cfs, respectively (Rick Engineering Company, March 26, 1998).

Existing and planned drainage improvements in the project area include storm drains within Otay Lakes Road, a storm drain discharge on the east side of Hunte Parkway adjacent to the EastLake Greens project area, an existing detention basin located adjacent to and immediately north of Olympic Parkway within Salt Creek, and an existing catch



Map Source: U.S.G.S. 7.5 minute topographic map, Jamul Mountains quadrangle

Project boundaries

Watershed boundaries

FIGURE 4.4-1

Watershed Boundaries

RECON

TABLE 4.4-1
SUMMARY OF DRAINAGE BASIN AREAS AND EXISTING DISCHARGES WITHOUT DETENTION

Basin	Existing Area (acres)	Existing Discharge (cubic feet/second)		
		100-year	50-year	10-year
1	624	940	810	470
2	298	500	430	250
1-2	922	1,230	1,050	580
3	690	900	780	430
1-3	1,612	1,950	1,650	860

SOURCE: Detention Study of Salt Creek at Orange Avenue (Rick Engineering Company, March 26, 1998).

basin near the northern "Land Swap" parcel. A second detention basin is planned for the area north of Otay Lakes Road and would reduce the developed peak discharge for the Salt Creek Watershed upstream of Otay Lakes Road.

Water Quality

For the management of storm water, municipalities in the San Diego region, including the City of Chula Vista, must comply with the Regional Water Quality Control Board's National Pollutant Discharge Elimination System (NPDES) Permit No. CA 0108758, which consists of wastewater discharge requirements for storm water and urban runoff. In compliance with Permit No. CA 0108758, a Best Management Practices Program for Storm Water Pollution Control has been created. BMPs appropriate to the characteristics of a project may be employed to reduce pollutants available for transport or to reduce the amount of pollutants in runoff prior to discharge to a surface water body. Among BMPs employed where the increase in impervious surfaces substantially increases runoff rates and volumes are:

- Detention basins, effective for very large drainage areas. These are essentially ponds with controlled release rates to minimize downstream effects. Some pollutants can settle during storage and improve the quality of water released.

- Infiltration basins, designed to hold runoff and allow percolation into the ground. These basins need adequate storage volume and good permeability of the underlying soils.

- Infiltration trenches and dry wells, holes, or trenches filled with aggregate and then covered. Dry wells are typically used for runoff from roofs; infiltration trenches typically serve larger areas, such as streets and parking lots in commercial areas. Both are best suited for areas with permeable soils and a sufficiently low water table or bedrock.

- Porous pavement such as lattice pavers or porous asphalt. These may be used to replace large areas of paving that are not subject to heavy traffic.

- Vegetative controls. Plant materials which intercept rainfall and filter pollutants and absorb nutrients.

- Grassed swales, shallow grass-covered channels used in place of a buried storm drain. This type of vegetative control is most applicable to residential areas.

BMPs can also include nonstructural methods, such as controlling litter and waste disposal practices.

Groundwater

Groundwater was encountered in subsurface explorations conducted along the existing drainage courses on the EastLake Trails property. The alluvium in the drainage course along the Trails northern site boundary, and particularly the area in the northwest corner of the Trails site, was generally saturated. The groundwater appears to be perched on the underlying formational material. Perched groundwater should also be expected at the bottoms of drainages on the "Land Swap" parcels. Shallower groundwater may be encountered during periods of precipitation (Geotechnics Incorporated 1998).

4.4.2 Impacts

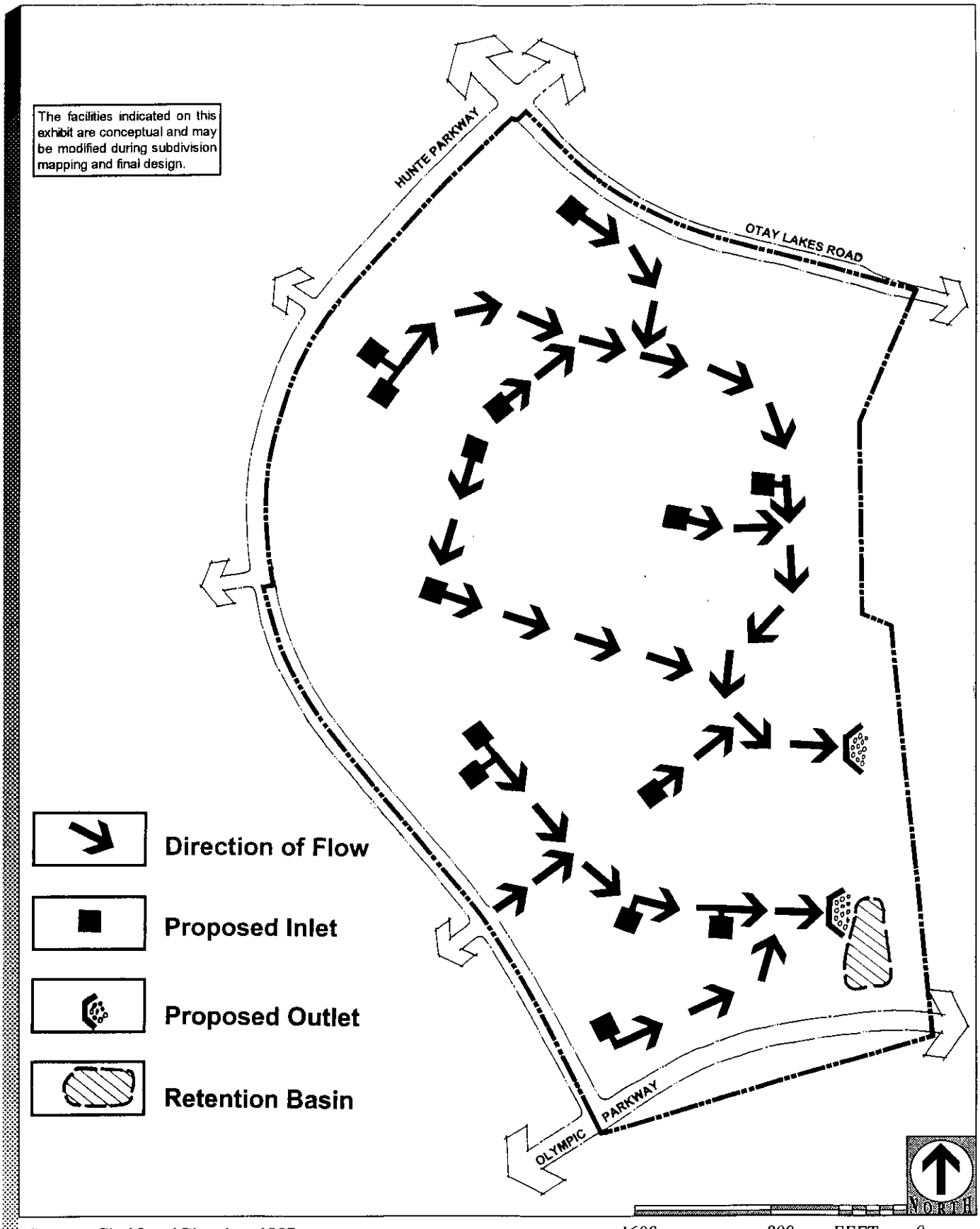
Drainage

EastLake Trails

The proposed grading plan would alter the existing runoff pattern by leveling hills and filling in on-site drainages. The EastLake Trails development plan includes an on-site storm water drainage system as shown in Figure 4.4-2. As noted above, the project area includes an existing detention basin located in Salt Creek, north of Olympic Parkway at the southern end of the site (see Figure 4.4-2). This detention basin has been designed to retain water to control runoff quantities from the Trails project site into the Salt Creek drainage. In addition, the project plans incorporate a second detention basin upstream of the existing basin within the Salt Creek corridor.

The on-site runoff would be collected in the proposed drain systems primarily located in the proposed public streets. The size and location of the proposed storm drain mains will be based on City of Chula Vista standards. The exact size and locations of the proposed storm drain system(s) will be determined in the future during final engineering phase(s) of the project. The proposed storm drain systems will outlet into the proposed Salt Creek Park area in three locations (see Figure 4.4-2) and flow downstream to the existing and proposed detention basin.

Within the Salt Creek drainage basin, an HEC-1 analysis was performed for the existing detention basin for detaining flows from new developments north of Otay Lakes Road (i.e., Salt Creek Ranch) and north of Olympic Parkway. The HEC-1 modeling (Rick Engineering 1998) included two proposed detention basins within the Salt Creek Ranch project. Table 4.4-2 presents the estimated post-developed peak flows for the 10-, 50- and 100-year storm of six-hour duration for the proposed subbasins shown in Figure 4.4-1. The City of Chula Vista requires that increased runoff from urbanization be detained to levels at or below natural conditions for the 10-, 50- and 100-year frequency storms. The results show that the existing detention basin is adequately designed to detain



Source: Cinti Land Planning 1997

FIGURE 4.4-2
Storm Water Plan

TABLE 4.4-2
SUMMARY OF DRAINAGE BASIN AREAS AND DISCHARGES WITH DETENTION

Basin	Area (acres)	Post-Developed Condition Discharge (cubic feet/second)		
		100-year	50-year	10-year
1	624	340	300	170
2	298	490	420	240
1-2	922	760	630	300
3	223	1,120	980	600
1-3	1,145	1,500	1,250	590
Out of Detention Basin 2	-------	1,400	1,180	570

SOURCE: Addendum to Detention Study of Salt Creek at Orange Avenue (Rick Engineering Company, April 27, 1998).

the 10-, 50- and 100- year storm peak discharges below the existing conditions peak discharges (Rick Engineering Company, May 1998).

Based on the drainage detention study prepared for Salt Creek and the SPA Plan prepared for the EastLake Trails project, the on-site drainage system and detention basin would adequately control runoff from the Trails site. The proposed development would not result in any significant changes to the drainage patterns and storm water discharge volumes.

"Land Swap" Parcels

Runoff from the two "Land Swap" parcels would be directed into existing drainage facilities in the roadways (e.g., Telegraph Canyon Road and EastLake Parkway) associated with each parcel. Adverse impacts are not anticipated .

Off-site impacts include the potential for flooding problems downstream from increased runoff from the developed site. Additional impacts to water quality may result from the use of reclaimed water for irrigation of parks and non-residential landscape on-site.

Water Quality

Development of both the EastLake Trails site and the "Land Swap" parcels would affect the natural drainage system. This impact can take the form of increased rate of rainfall runoff, soil erosion and sedimentation from steep unprotected areas, runoff pollution, and drainage diversion. In addition, the land use change from agricultural to urban would result in an increase of impervious surfaces (roads, walkways, buildings, and parking lots) and increase the volume of runoff. Some of the soils on-site are sandy and uncontrolled runoff water could cause erosion, unstable slopes, and a build-up of silt deposits at the base of slopes, within the drainage courses, and in storm drains.

Development of the natural areas of both the Trails and the "Land Swap" parcels would affect not only the quantity but also the quality of the resulting runoff. Runoff flowing across these impervious surfaces and landscaping would contain pollutants such as oils, fuel residues, heavy metals (associated with gasoline), fertilizers, and pesticides which are typically associated with urban development. The pollutants would diminish water quality in downstream areas.

Urban runoff from the project sites would not by itself carry enough pollutants to significantly degrade the water quality in downstream areas. However, development of the Trails and "Land Swap" parcels would contribute cumulatively with other projects in the watershed in affecting the water quality of this portion of the watershed. Implementation of pollution control devices and BMPs would help to lessen the cumulative effect.

The drainage objectives in the SPA Plan include minimizing runoff pollution from developed areas and mitigating pollution impacts through the use of Best Management Practices (BMPs). Specific BMPs would be specified by the City Engineer.

Groundwater

Shallow groundwater may be encountered at the site, particularly in the drainage courses. Some dewatering at the site may be necessary to facilitate removal of compressible materials where structural improvements are planned. Soils excavated from beneath water tables would require drying prior to inclusion in compacted fills. In addition, perched or shallow groundwater conditions may be controlled by the installation of canyon subdrains.

4.4.3 Level of Significance Prior to Mitigation

Development of the proposed project would cause an increase in the amount of runoff and would have potentially significant impacts on downstream drainage facilities. The use of detention basins to control runoff discharge and the implementation of the following water quality mitigation measures would reduce potentially significant impacts to a level less than significant.

4.4.4 Mitigation Measures

The following measures would reduce levels of erosion, sedimentation, and runoff during construction activities.

4.4.4.1 Hydroseeding and landscaping of any cut/fill slopes disturbed or built during the construction phase of this project with appropriate ground cover vegetation would be performed within 30 days of completion of grading activities.

4.4.4.2 Areas of native vegetation or adjoining slopes to be avoided during grading activities would be delineated in the field based on adopted grading plans to minimize disturbance to existing vegetation and slopes.

4.4.4.3 Artificial ground cover, hay bales, and catch basins to retard the rate of runoff from manufactured slopes would be installed if grading occurs during wet weather season, November 1 through April 1.

4.4.4.4 Fine particulates in geologic materials used to construct the surficial layers of manufactured slopes would not be specified unless a suitable alternative is not available.

4.4.4.5 Temporary sedimentation and desilting basins between graded areas and streams would be provided during grading.

In addition to the above mitigation measures, BMPs appropriate to the characteristics of the project shall be employed to reduce pollutants available for transport or to reduce the amount of pollutants in runoff. Such BMPs may include the following:

4.4.4.6 Detention basins, effective for very large drainage areas. These are essentially ponds with controlled release rates to minimize downstream effects. Some pollutants can settle during storage and improve the quality of water released.

4.4.4.7 Infiltration basins, designed to hold runoff and allow percolation into the ground. These basins need adequate storage volume and good permeability of the underlying soils.

4.4.4.8 Infiltration trenches and dry wells, holes, or trenches filled with aggregate and then covered. Dry wells are typically used for runoff from roofs; infiltration trenches typically serve larger areas, such as streets and parking lots in commercial areas. Both are best suited for areas with permeable soils and a sufficiently low water table or bedrock.

4.4.4.9 Porous pavement such as lattice pavers or porous asphalt. These may be used to replace large areas of paving that are not subject to heavy traffic.

4.4.4.10 Vegetative controls. Plant materials which intercept rainfall and filter pollutants and absorb nutrients.

4.4.4.11 Grassed swales, shallow grass-covered channels used in place of a buried storm drain. This type of vegetative control is most applicable to residential areas.

BMPs can also include nonstructural methods, such as controlling litter and waste disposal practices. Appropriate BMPs for the project shall be in compliance with the Regional Water Quality Control Board's NPDES Permit No. CA 0108758, which consists of wastewater discharge requirements for storm water and urban runoff. BMPs appropriate to the characteristics of a project shall be employed to reduce pollutants available for transport or to reduce the amount of pollutants in runoff prior to discharge to a surface water body. Identification of appropriate BMPs to the satisfaction of the City Engineer shall be a condition of future tentative map approval.

4.4.5 Level of Significance After Mitigation

All impacts to hydrology and water quality would be mitigated to below significance with implementation of the above-listed mitigation measures at the time tentative maps are

processed. These measures shall be made conditions of the future tentative maps and shall be shown on the final grading and improvement plans. The size, capacity, and location of any other pollution control devices which would be used to capture urban pollutants on-site shall be determined prior to or as part of the recordation of the future final subdivision maps.

4.5 Landform Alteration/Visual Quality

4.5.1 Existing Conditions

Landform

EastLake Trails

The local topography of the EastLake Trails site consists of gently rolling hills with intermittent drainages flowing in a southeast direction into Salt Creek, a north-south drainage along the eastern edge of the site. Riparian vegetation occurs along the Salt Creek drainage with increasing vegetation in the southeast corner of the site, where a man-made earthen dam exists. A pond estimated at 1.5 acres is located north of the dam. The pond fills during the fall and winter months and is usually dry during the summer months. The majority of the project site is barren with sparse grasses along Hunte Parkway. In the past the land was dry farmed for barley and is currently being farmed for oat production, primarily to be harvested for cattle feed and hay. As shown in Figure 4.5-1, elevations on the site range from approximately 480 feet along the Salt Creek drainage to around 660 feet in the northwest portion of the site.

The EastLake Trails project area is bordered on the north by paved Otay Lakes Road. The area to the north of this road is undeveloped rolling hills currently used for cattle grazing. The site is bordered on the west by paved Hunte Parkway and across Hunte Parkway is the developed EastLake Greens residential neighborhood. Currently, there is no road on the eastern border which is currently undeveloped. There is a paved one-lane service road on the south providing access to a waste water pump station located southwest of the earthen dam on-site. Also, a paved one-lane service road runs from the Fenton Ranch south parallel to Salt Creek approximately 100 feet east of the stream course to a temporary sewer pump station that currently serves the Olympic Training Center. This pump station is located immediately adjacent to and east of the 1.5-acre seasonal pond in the southern end of Salt Creek. This pump station will be abandoned once Olympic Parkway is completed, and the pump station southwest of the dam will serve the Olympic Training Center. The area south of the Trails site is within the Otay Ranch Project and is currently undeveloped agricultural land.

Land uses on-site are limited given the past agricultural use of the property. The Fenton Ranch and associated building are located at the northeast portion of the parcel and are surrounded by eucalyptus trees. At the southern end of the site is a waste water pump station which is just southwest of the earthen dam.

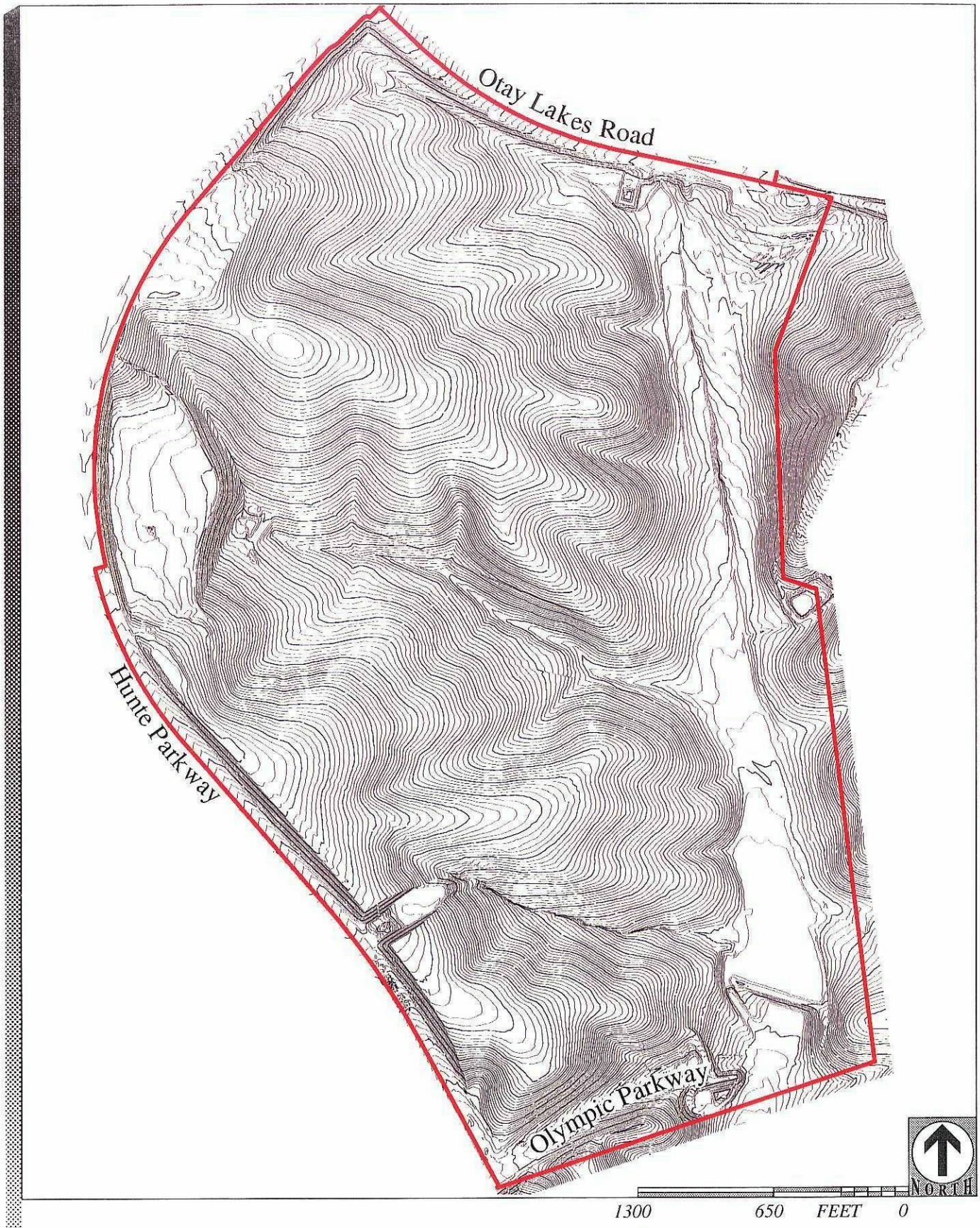


FIGURE 4.5-1

Existing Topography of EastLake Trails

RECON

"Land Swap" Parcels

The two "Land Swap" parcels are located to the west and southwest of the EastLake Greens development. The topography for both "Land Swap" parcels consists of gently rolling hills. The northern "Land Swap" parcel is bordered on the northwest by Otay Lakes Road, and future SR-125 will border the eastern side. Other uses on the northern "Land Swap" parcel site include an 80-foot easement for the underground Second San Diego Aqueduct on the southwestern border and San Diego Gas and Electric's 120-foot easement for their 230-kilovolt (kV) transmission line which parallels the aqueduct. The area to the southwest of the northern "Land Swap" is within the Otay Ranch, has an approved tentative map, and is scheduled for development in 1998. This area currently consists of undeveloped gently rolling hills. Areas to the north, west, and east of the northern "Land Swap" parcel are developed.

The southern "Land Swap" parcel is bordered on the west by open space designated for future SR-125. At the northern border of the property is the Otay Water District's 30-million-gallon (mg) water storage reservoir (reservoir 624-3) and an open space area east of the reservoir designated for future public/quasi-public use. The San Diego Aqueduct easement, and the easement for San Diego Gas and Electric's transmission lines border the property on the east. The EastLake Greens residential neighborhood is just east of the site. The areas to the south and west of the site are within the Otay Ranch project and are anticipated to be developed as residential and commercial uses. At present this area is being used for agriculture. Poggi Canyon is southwest of the property.

Visual Character

EastLake Trails

Views from most areas on the EastLake Trails site are scenic with gently rolling hills in the foreground and distant views of Mother Miguel and San Miguel mountains to the north, the Jamul Mountains and Proctor Valley to the northeast, and the San Ysidro Mountains to the east and southeast. A riparian area along the Salt Creek drainage is located in the southeast portion of the site and can be viewed from most areas on-site. Views to the west include the EastLake Greens residences and views to the east and southeast include the Olympic Training Center and San Diego Gas and Electric's power lines. Views of Otay Lake are blocked by higher terrain east of the site.

Figure 4.5-2 shows the location where Photographs 1 through 5, depicting views of the Trails site, were taken and the direction of the photographs. Photograph 1 shows a view of the northern boundary of the site looking east along Otay Lakes Road with the Fenton Ranch in the foreground. The photograph was taken from the corner of Otay Lakes Road and Hunte Parkway. Photograph 2 shows a panoramic view of the site taken from the intersection of Hunte Parkway and Clubhouse Drive. This view shows San Miguel

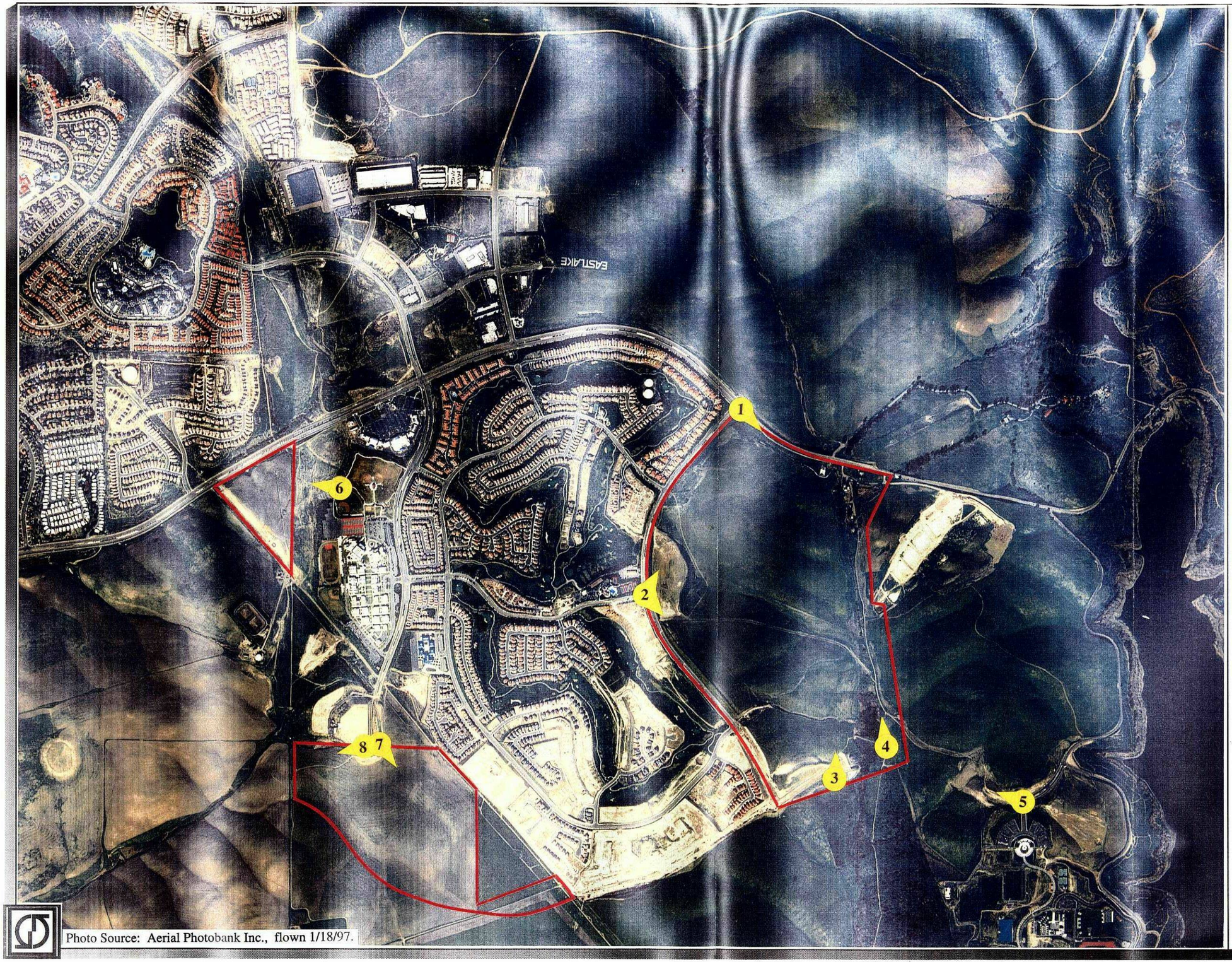


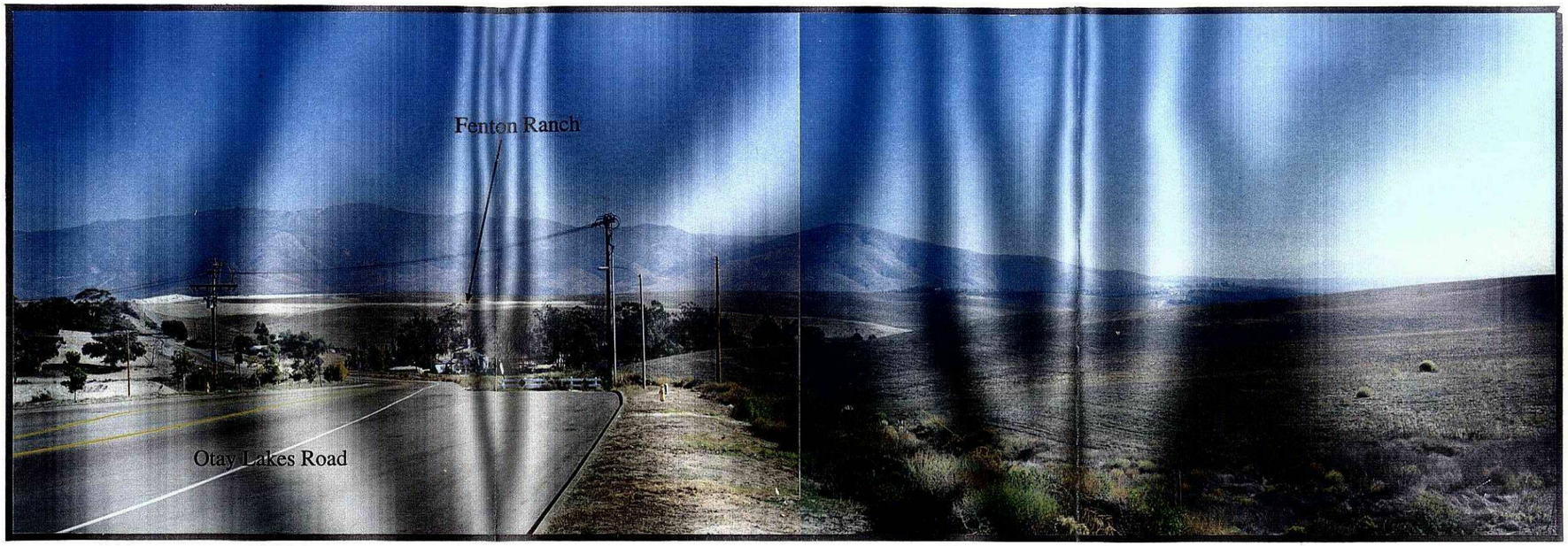
Photo Source: Aerial Photobank Inc., flown 1/18/97.

FIGURE 4.5-2

Photograph Locations

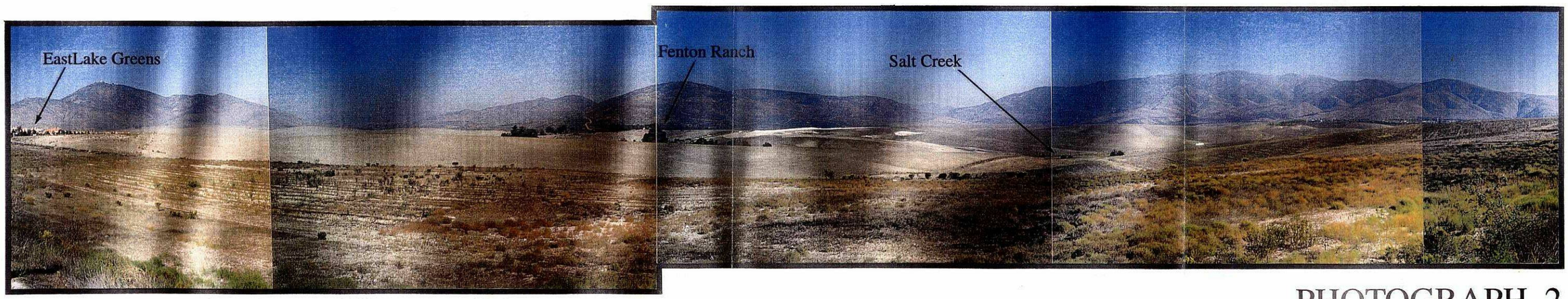
NO SCALE

NORTH



PHOTOGRAPH 1

View of the Northern Boundary of the Trails Site



PHOTOGRAPH 2

Easterly View of the Trails Site from the West Boundary

Mountain to the north, the Jamul Mountains to the northeast, the San Ysidro Mountains to the east and southeast, and the Olympic Training Center to the southeast. The gently rolling topography on-site and the disturbed nature of the terrain from previous agricultural activity is apparent from Photographs 1 and 2.

Photograph 3 shows the southern portion of the Trails site with a view looking north towards San Miguel Mountain. This view shows the Fenton Ranch surrounded by eucalyptus trees in the left portion of the photograph and the vegetation along Salt Creek in the right portion of the photograph. The road in the foreground leads to the waste water pump station at the southern boundary of the site. This photograph clearly shows the disturbed nature of the site from previous agricultural activity. Photograph 4 was taken from the east side of the earthen dam in the Salt Creek drainage looking north up the drainage towards the Fenton Ranch. This view clearly shows the riparian vegetation along the Salt Creek drainage. The residences of EastLake Greens are visible in the left portion of the photograph.

Photograph 5 was taken off-site at the main entrance to the Olympic Training Center looking west towards the site. This photograph shows the western portion of the site and the adjacent residences of EastLake Greens.

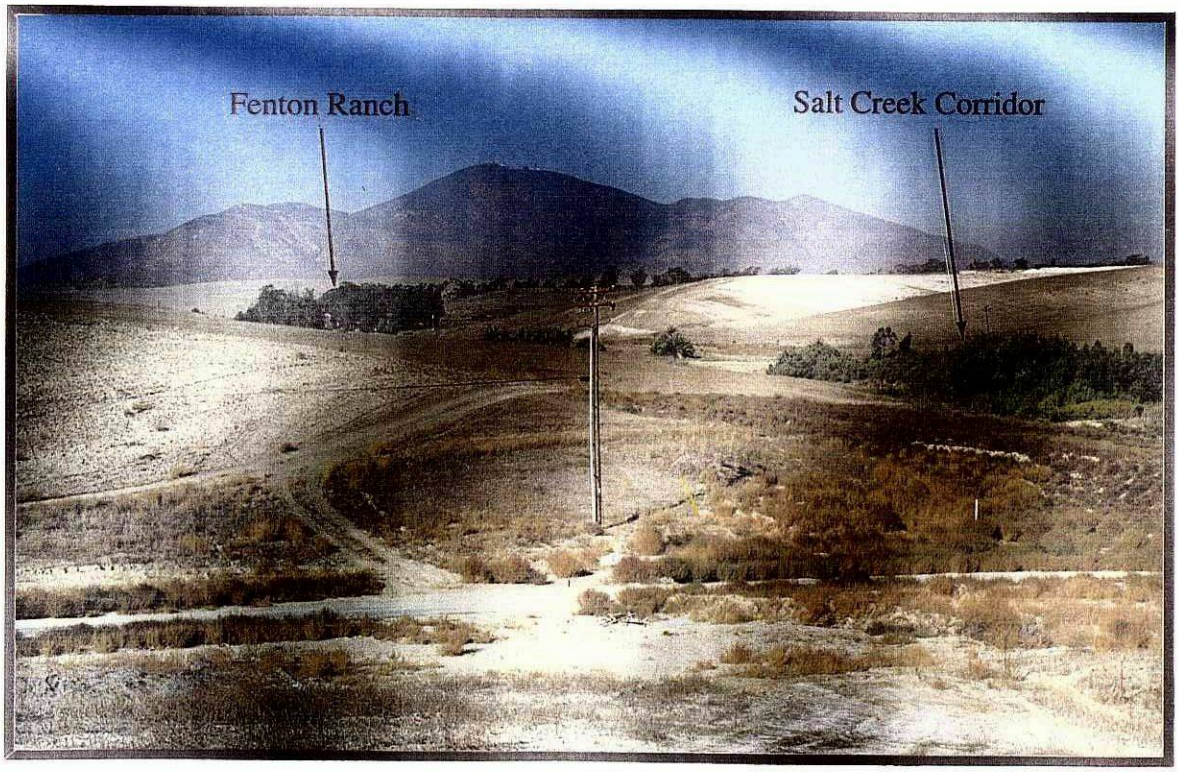
"Land Swap" Parcels

Views to the west of the northern "Land Swap" parcel are of Otay Lakes Road and residential neighborhoods. Distant views to the west include Sharp Hospital. To the northeast is the EastLake Village Center commercial area and to the east and southeast is EastLake High School and Chula Vista Community Park.

Views to the south and southwest of the southern "Land Swap" parcel are of barren rolling hills and Poggi Canyon, and distant views of the hills above Tijuana, Mexico. Views to the west and northwest include Sharp Hospital, a water tank surrounded by eucalyptus trees, and distant views of Point Loma, the Pacific Ocean, and downtown San Diego. Views to the north include the Otay Water District 30-mg water reservoir (reservoir 624-3), EastLake High School, and EastLake Elementary School. The EastLake Greens residential neighborhood is on the eastern boundary of the site.

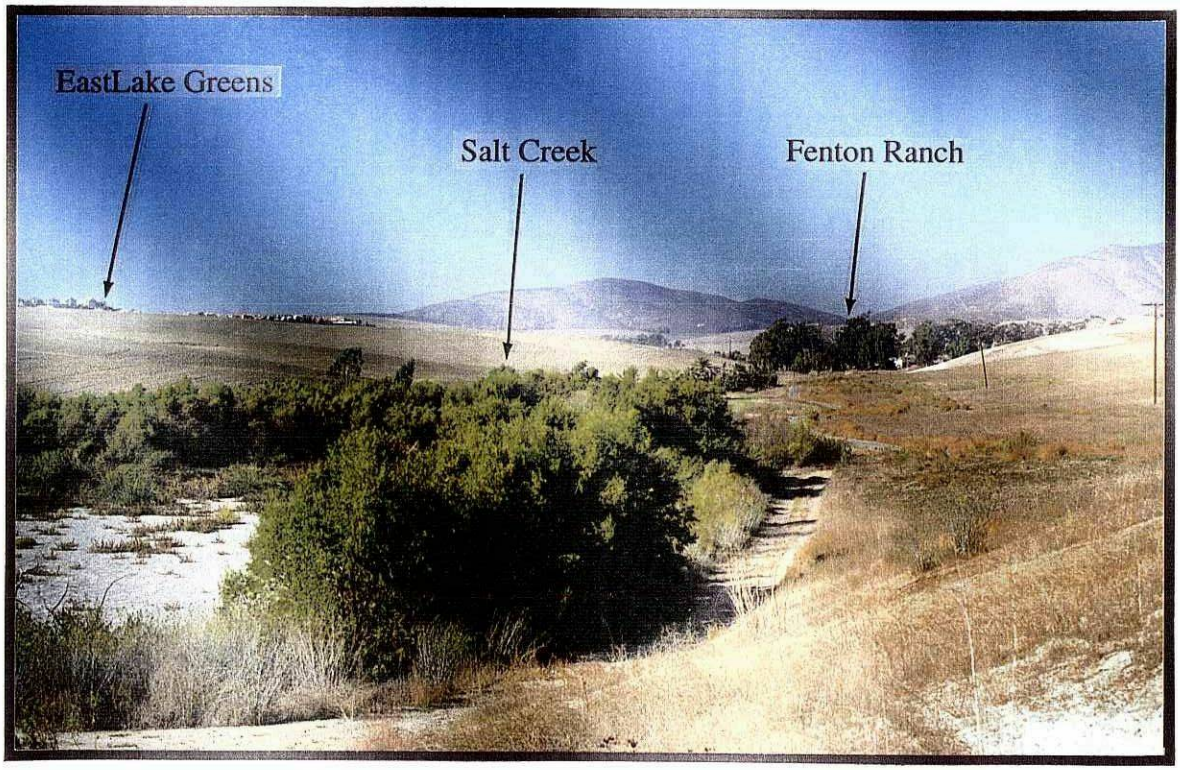
Photographs 6 through 8 depict views of the "Land Swap" parcels and the photograph locations are also shown in Figure 4.5-2. Photograph 6 was taken from just downhill of the baseball field on the northwest corner of EastLake High School. The foreground area is designated for the future SR-125. This view clearly shows the gently rolling topography and the disturbed nature of the site from previous agricultural activity.

Photographs 7 and 8 are of the southern "Land Swap" parcel and were taken at the southeast corner of the Otay Water District's 30-mg water reservoir. The view in



PHOTOGRAPH 3

View Looking North at the Southern Portion of the Trails Site

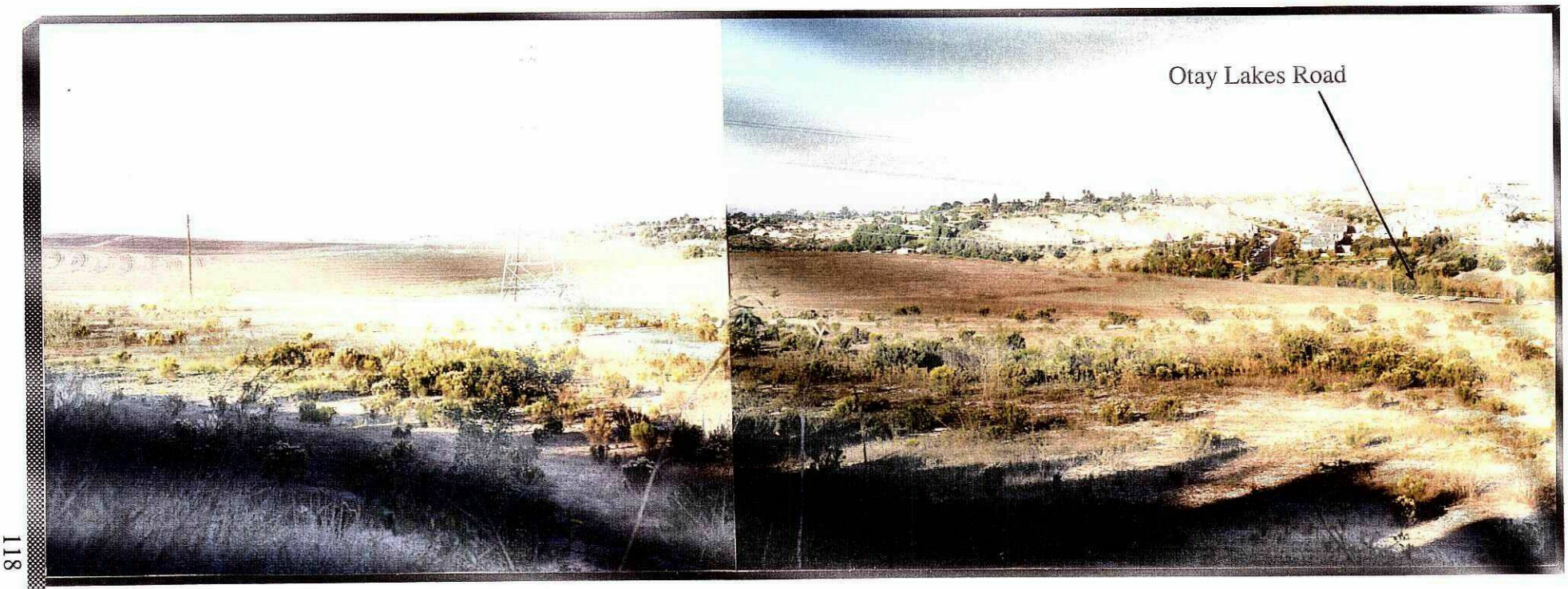


PHOTOGRAPH 4

View Looking North of the Salt Creek Drainage

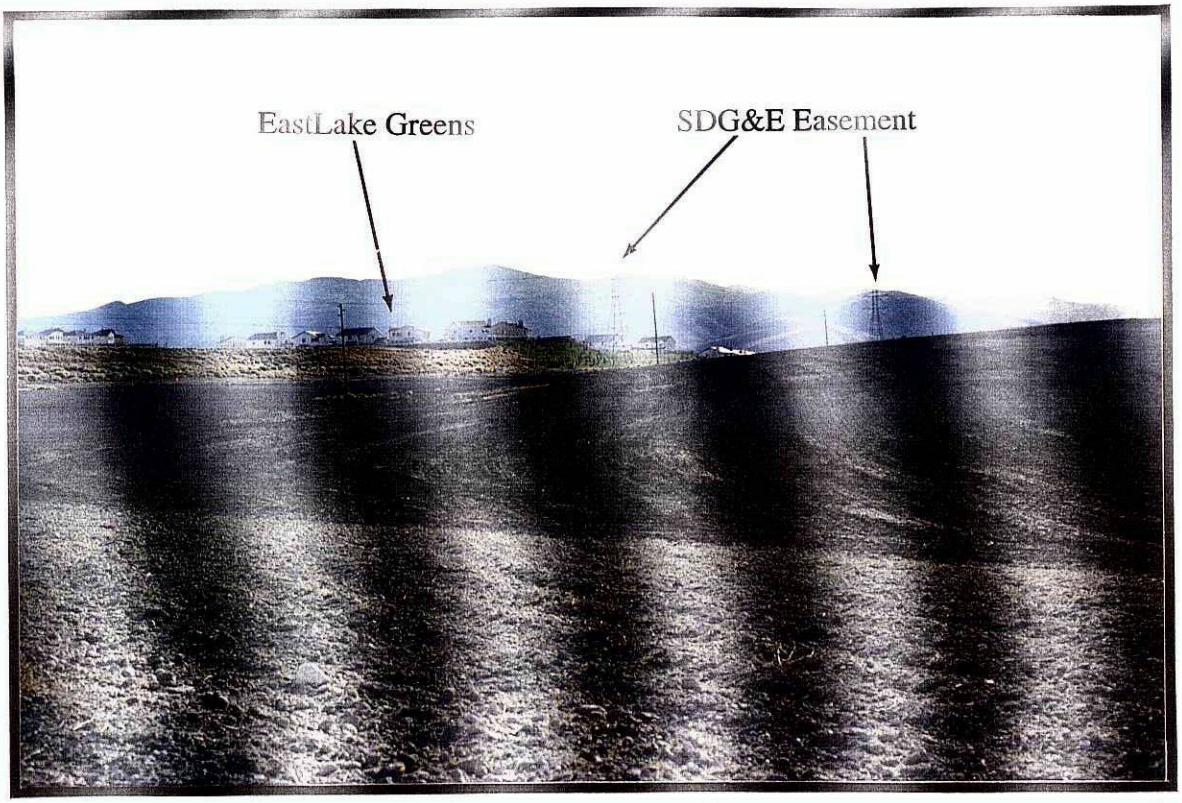
PHOTOGRAPH 5

Westerly View of the Trails Site from the Olympic Training Center



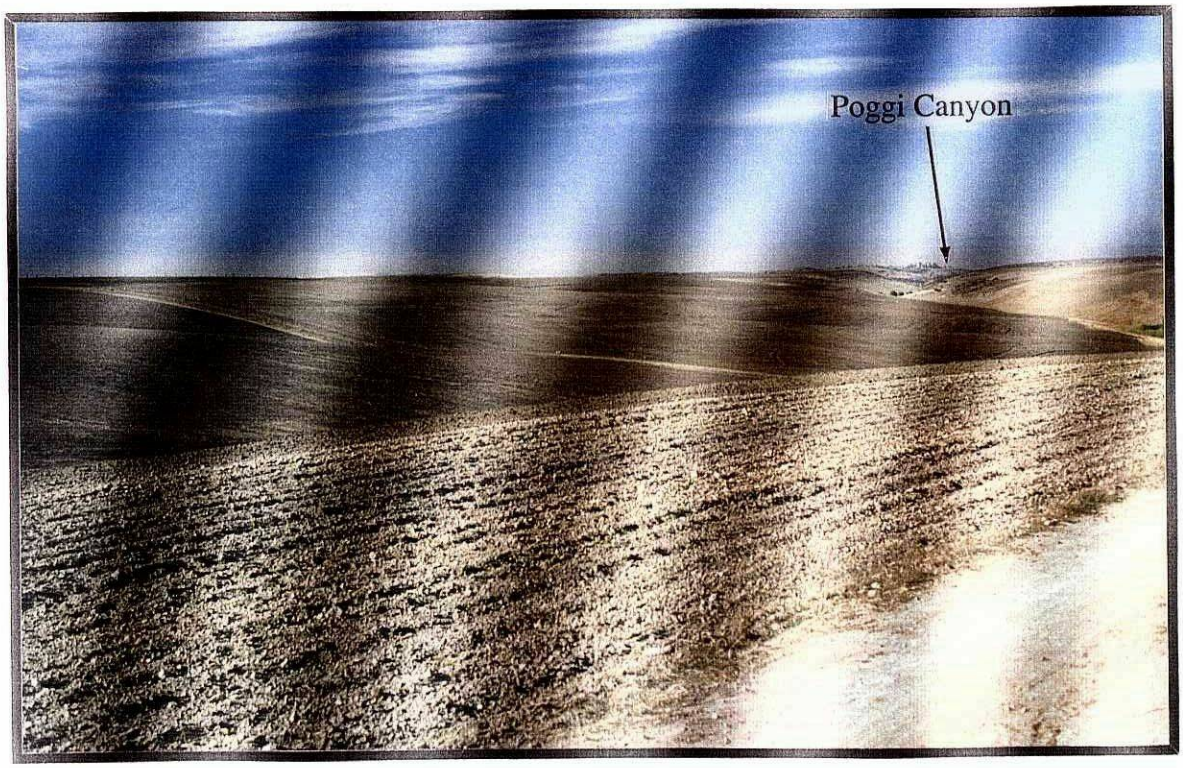
PHOTOGRAPH 6

View Looking West from the Northern Land Swap Parcel



PHOTOGRAPH 7

View of the Southeast Portion of the Southern Land Swap Parcel



PHOTOGRAPH 8

View of the Southwest Portion of the Southern Land Swap Parcel from the North Boundary

Photograph 7 is looking southeast into the site with a view of the residences of EastLake Greens and distant views of the Jamul Mountains. Photograph 8 is a view looking southwest down Poggi Canyon. Both views clearly show the agricultural use of the site.

Views of the Project Site

EastLake Trails

Views of the EastLake Trails site from surrounding areas is limited by topography. The EastLake Trails site is viewed from Hunte Parkway and the EastLake Greens residential development on the west, from Otay Lakes Road on the north, and from future Olympic Parkway on the south. Also, the site can be viewed from the Olympic Training Center, southwest of the site. The intervening topography prevents views of the site from Otay Lakes Park at Otay Lake, which is located to the east of the site off Wueste Road.

"Land Swap" Parcels

The northern "Land Swap" area is visible from Otay Lakes Road, and the EastLake Greens residential neighborhood, EastLake High School, and Chula Vista Community Park located to the east. The southern "Land Swap" parcel is visible from the EastLake Greens residential neighborhood, EastLake High School, and the EastLake Elementary School located to the north, and will be visible from future Olympic Parkway on the south. Sharp Hospital which is located at a higher elevation to the west will have a view of both "Land Swap" project areas.

Lighting/Astronomical Dark Sky

EastLake Trails and the "Land Swap" parcels are located in an area where natural night-sky illumination is relatively low and the potential for optical astronomical research is high. Mt. Palomar and Mt. Laguna, two major observatories, are located within 50 miles of the project area.

4.5.2 Impacts

Landform

EastLake Trails

The proposed development of the EastLake Trails site and the "Land Swap" parcels would alter the existing landform and visual characteristics of the sites. The proposed EastLake Trails development includes grading throughout most of the site that would substantially alter the existing topography. The proposed grading plan for the EastLake Trails project is shown in Figure 4.5-3. Approximately, 283.9 acres or 93 percent of the

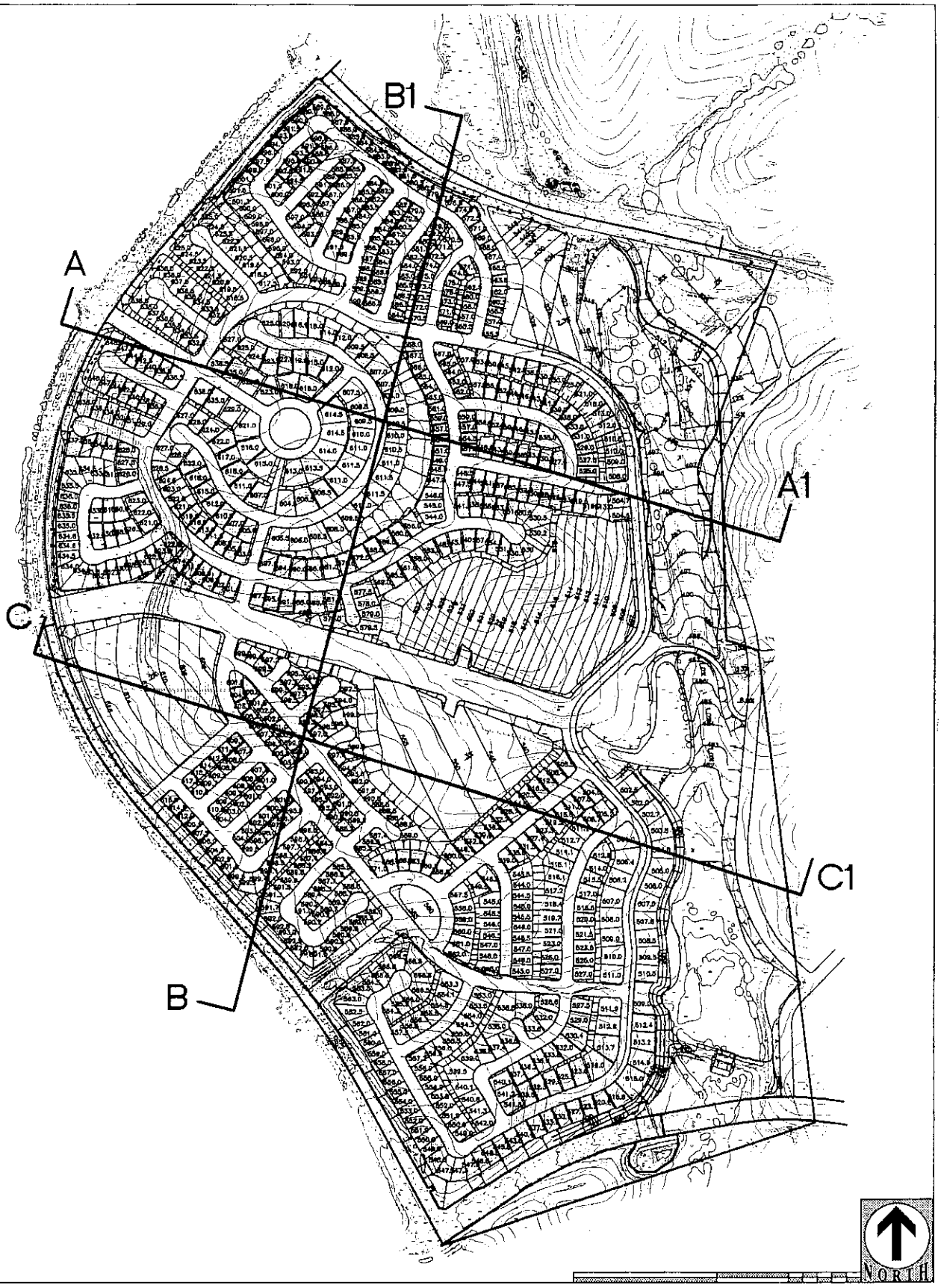


FIGURE 4.5-3

Proposed Grading Plan and Cross Section Locations for EastLake Trails

site would be disturbed by grading. Total earthwork quantities is estimated at 3,200,000 cubic yards of cut and 3,100,000 cubic yards of fill or approximately 11,260 cubic yards per graded acre. The southeastern portion along the Salt Creek drainage would not be graded and is proposed open space to protect and maintain the riparian area in its natural state. A manufactured slope of a maximum 50 feet in height will border the Salt Creek drainage and the pump station located at the southern end of the site. As shown in Figure 4.5-3, the majority of the Salt Creek corridor north of Clubhouse Drive would be disturbed by grading for the linear park and related uses.

The natural topography of the site increases in elevation from approximately 455 feet above MSL in the southeast corner to approximately 648 feet MSL at a hilltop in the northwest portion of the site. The grading plan generally follows this elevation pattern and grading is planned to blend with the natural contours wherever possible. In order to accommodate construction on the site, the grading would involve leveling hills, filling in small interior drainages, and creating manufactured slopes in order to terrace the existing overall landform. Representative cross sections showing the depth of cut and fill are also shown in Figure 4.5-4, with locations included on Figure 4.5-3. Manufactured slopes will also extend most of the perimeter of the parcel. Cut slopes up to approximately 65 feet high, and fill slopes up to approximately 50 feet high, are planned. The inclination of the slopes will be generally at a 2:1 ratio (horizontal to vertical) or flatter.

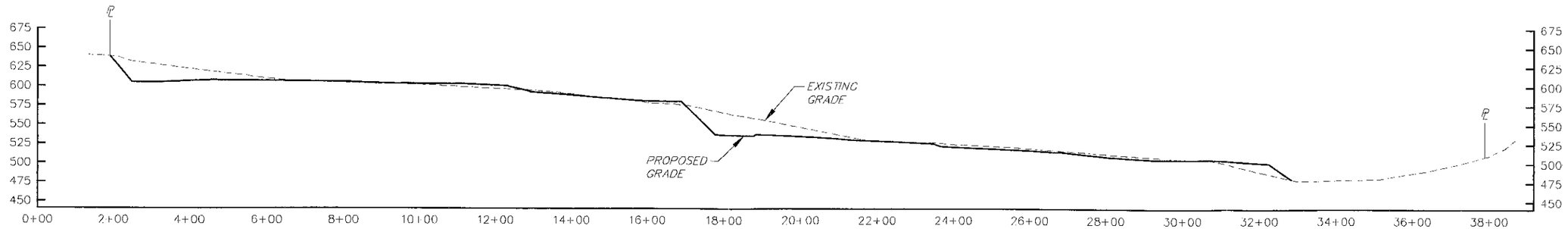
"Land Swap" Parcels

The existing landform for both "Land Swap" parcels would be significantly altered by grading. Impacts associated with the grading for SR-125 with respect to the "Land Swap" parcels will be addressed as part of the Final EIS for SR-125. The proposed grading plan are shown in Figures 4.5-5 and 4.5-6. Implementation of the project grading plan for both parcels would level hills and fill in small drainages.

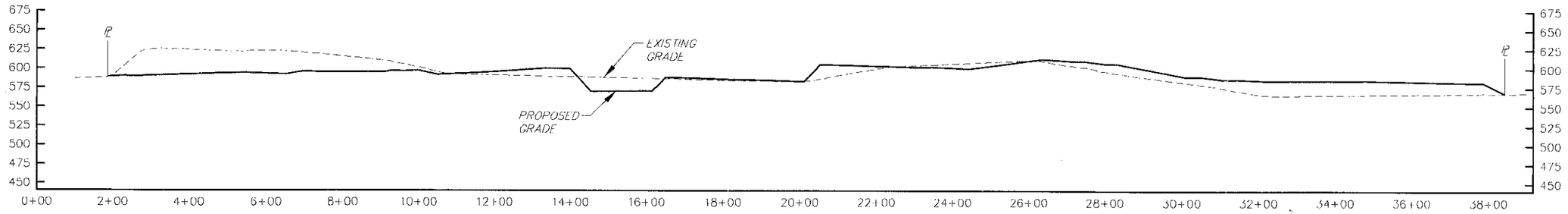
Visual Character

EastLake Trails

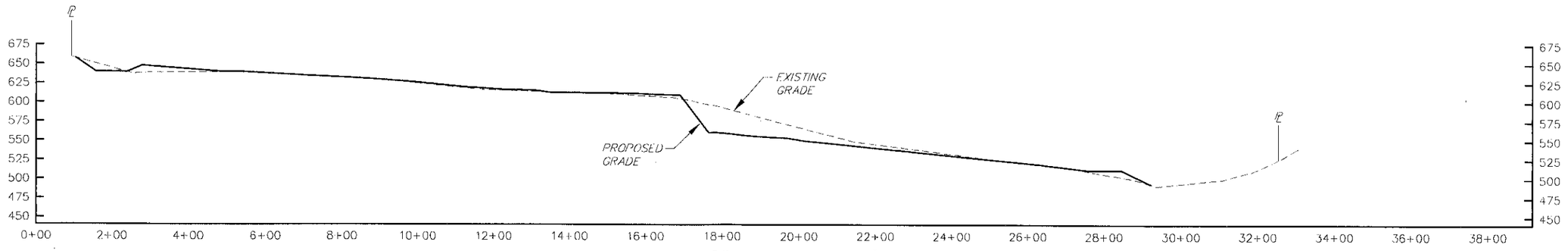
On-site views would be influenced by project development plans. The Salt Creek corridor is designated an open space linear park and views of this area would remain from the developed site. Development of the site would not result in significant visual impacts to on-site views. The SPA plan contains Design Guidelines for grading, site design, density, arrangement, circulation, housing types, facade textures, spacing of homes, and landscaping to avoid internal visual impacts.



SECTION A - A¹



SECTION B - B¹

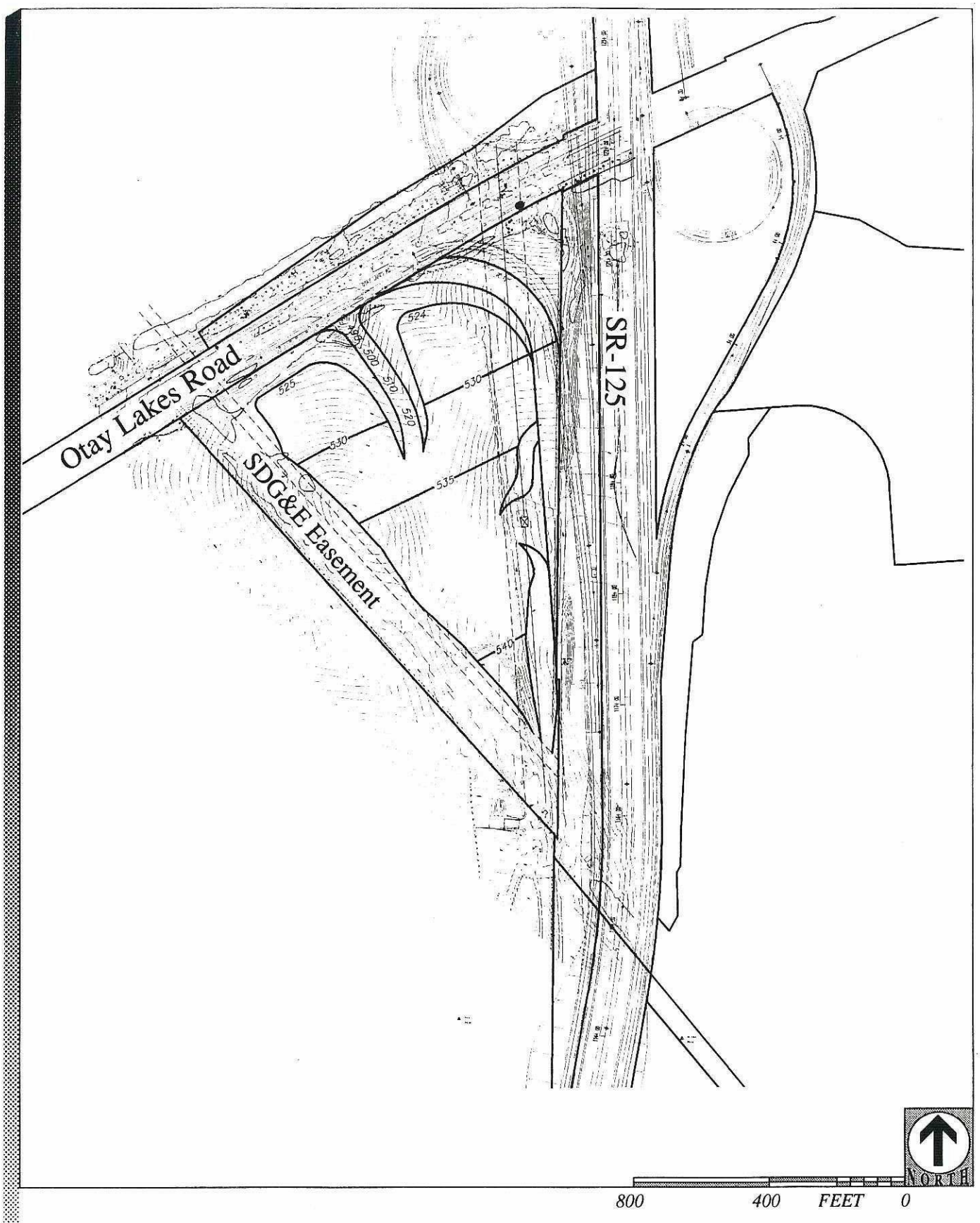


SECTION C - C¹

Source: P & D Technologies 1997

FIGURE 4.5-4

Representative Cross Sections for the EastLake Trails Site



Source: P & D Technologies 1997

FIGURE 4.5-5

Proposed Grading Plan for Northern Land Swap Parcel

RECON

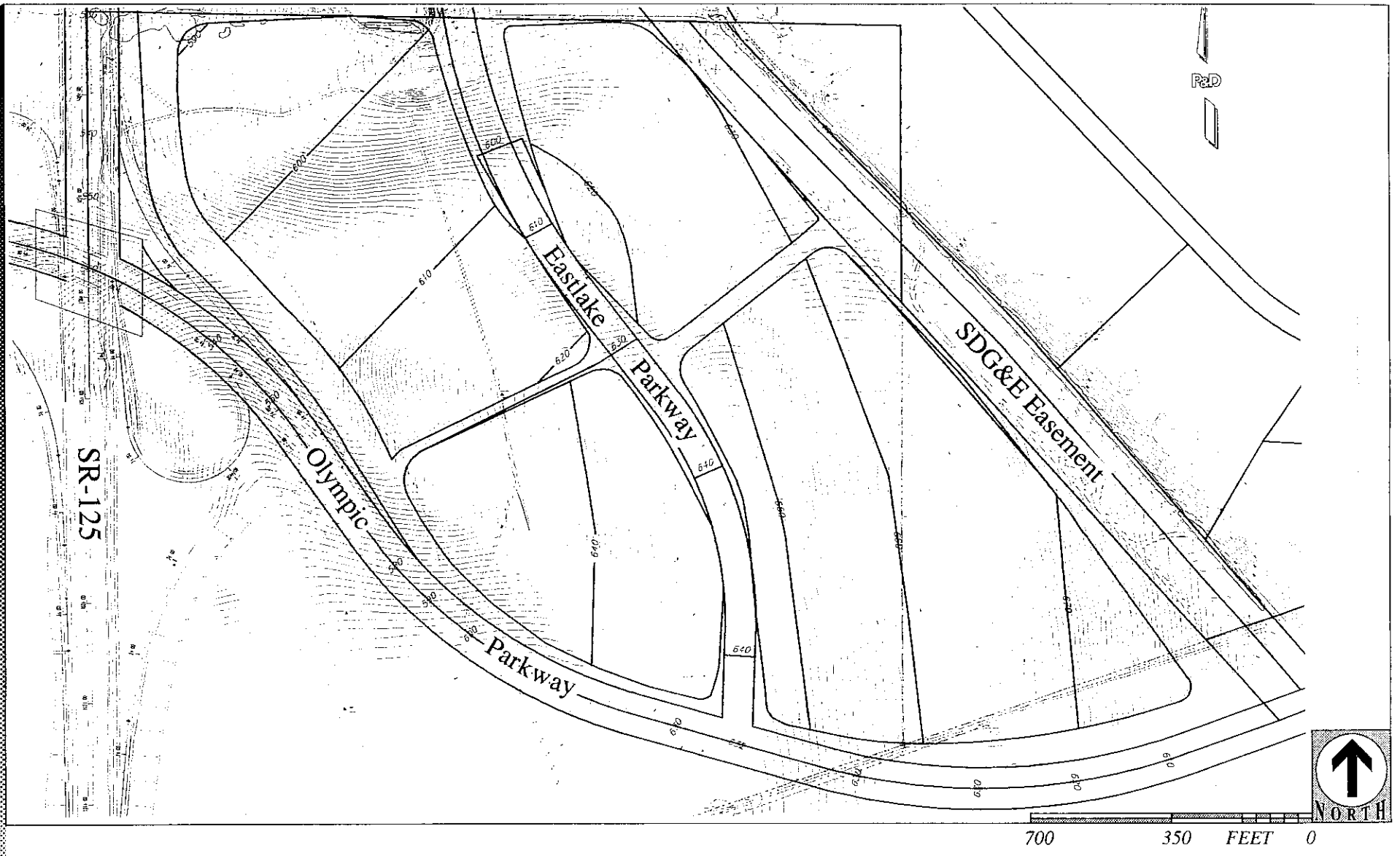


FIGURE 4.5-6

Proposed Grading Plan for Southern Land Swap Parcel

RECON

Development of the Trails would, however, result in aesthetic impacts for surrounding areas. Grading and construction activities would create short-term visual impacts. These impacts are not considered significant due to their limited duration and the restricted visual access from surrounding areas. The permanent change in land use from agricultural to an urban landscape would be a long-term aesthetic impact from off-site locations such as Otay Lakes Road, Olympic Training Center, Hunte Parkway, and future Olympic Parkway. However, the proposed project is similar and compatible to the adjacent EastLake Greens residential community and would also be similar to future development (EastLake III), which has been planned for the surrounding areas EastLake. In addition, the proposed development for the EastLake Trails project site was anticipated with the approval of the EastLake II GDP and the accompanying previous environmental documents (i.e., Final EIR for EastLake Greens SPA and EastLake Trails pre-zone and annexation). The visual quality impacts were anticipated to be potentially significant, but mitigated through the SPA Plan Design Guidelines.

"Land Swap" Parcels

The development of the two "Land Swap" parcels also would result in both short- and long-term visual impacts. Short-term impacts would be associated with grading and construction activities and long-term impacts would involve the permanent land use change from agricultural to urban use.

The construction of SR-125 may present potential visual impacts for the proposed residential units in the southern "Land Swap" parcel. However, potential impacts are unlikely since the proposed commercial use would visually separate SR-125 from the residential "Land Swap" parcel located east of EastLake Parkway. In addition, SR-125 would be below the elevation of the commercial area. Appropriate residential unit orientation and landscaping could be used to mitigate any potential visual impacts from surrounding future developments.

Lighting/Astronomical Dark Sky

Development of the Trails and the "Land Swap" parcels would increase night-sky illumination levels. This impact is not considered significant. The project area is a considerable distance from the two observatories and would represent only a minor change to night-sky illumination. Development of the proposed project, in addition to surrounding developments in the region, would result in a cumulatively impact on night-sky illumination levels.

4.5.3 Level of Significance Prior to Mitigation

The proposed development of EastLake Trails and the "Land Swap" parcels would result in significant on-site landform and visual quality impacts. The visual character of the site

would change from agricultural to planned community. Implementation of the mitigation measures listed below would reduce the landform and visual impacts to below a level of significance.

Development of EastLake Trails and the "Land Swap" parcels would add to the cumulatively night-sky illumination impacts occurring in the San Diego region. However, this is not a significant impact.

4.5.4 Mitigation Measures

4.5.4.1 At the time tentative maps are processed for EastLake Trails and the "Land Swap" parcels, compliance with the respective SPA Plan Design Guidelines would be required as conditions of approval to ensure that significant landform alteration and visual impacts are reduced to below a level of significant. The mitigation requirements included in the design guidelines involve architectural and site design, lighting, fencing, circulation, and comprehensive grading and landscaping plans, among other techniques. Plans detailing the proposed Design Guidelines are included in the EastLake Greens and Trails SPA Plans.

4.5.5 Level of Significance After Mitigation

Compliance with the Trails and Greens SPA Plan Design Guidelines would reduce visual impacts to a level of insignificance.

4.6 Noise

This section summarizes the acoustical study for the proposed project prepared by RECON. The complete technical report is included in this SEIR as Appendix G. The acoustical study included an analysis of specific details of the proposed project including projected traffic volumes, and grading to determine the location and nature of any barriers required to meet City of Chula Vista standards.

4.6.1 Existing Conditions

Standards

In the city of Chula Vista, noise standards applicable to traffic generated noise are expressed in terms of the community noise equivalent level. The community noise equivalent level (CNEL) is a 24-hour A-weighted decibel average sound level [dB(A) L_{eq}] from midnight to midnight obtained after the addition of 5 dB to sound levels occurring between 7:00 P.M. and 10:00 P.M. and 10 dB to the sound levels occurring between 10:00 P.M. and 7:00 A.M. A-weighting is a frequency correction that often correlates well with the subjective response of humans to noise. The 5 dB and 10 dB penalties added to the evening and nighttime hours account for the added sensitivity of humans to noise during these time periods. The noise level standards for the City of Chula Vista are defined in Title 19 of the Chula Vista Municipal Code and in the City of Chula Vista General Plan (1989). The City's exterior noise level standard for noise-sensitive areas, which include residences and schools, is 65 CNEL. The City also specifies a residential interior noise level standard of 45 CNEL for noise-sensitive interior rooms. The City's exterior noise standard for office buildings and commercial property is 70 CNEL.

EastLake Trails

The EastLake Trails project site is presently undeveloped. The only existing roadways adjacent to the site are Otay Lakes Road on the north and Hunte Parkway on the west. Olympic Parkway does not yet exist in this location. There are no improved roadways currently on-site. The property is surrounded by undeveloped land to the north, east, and south and EastLake Greens residential development on the west with no major sources of noise on or near the project site.

The primary sources of noise in the project area are vehicular traffic on surrounding local streets. The main streets include Otay Lakes Road and Hunte Parkway as indicated above. These roadways provide the primary access to the project area.

Northern "Land Swap" Parcel

Currently, the site is not graded. The dominant source of noise is traffic on Otay Lakes Road, which is the only existing road in the vicinity. Future SR-125 will be located adjacent to the eastern parcel boundary. Additionally, an SDG&E high-tension power line easement occurs on-site along the parcel eastern boundary.

Southern "Land Swap" Parcel

Currently, the site is not graded. There are no existing roadways in the vicinity of the parcel. Future Olympic Parkway will be adjacent to the parcel's southern boundary, future SR-125 will be adjacent to the parcel's western boundary, and future EastLake Parkway will bisect the parcel in a north-south direction.

4.6.2 Impacts

EastLake Trails

Impacts to future sensitive receivers were evaluated in relation to the noise level standards discussed above.

Noise generated by future traffic was projected using the STAMINA 2.0/OPTIMA computer models from Vanderbilt University (1991). These models are computerized versions of the Federal Highway Administration Noise Prediction Model, which uses California vehicle noise emission (Calveno) levels (California Department of Transportation 1983).

The proposed project would be affected by traffic noise generated on Otay Lakes Road, Hunte Parkway, and Olympic Parkway. The traffic on these streets could generate noise levels greater than 65 CNEL, which is the City's residential exterior standard, at ground-level sensitive receivers on a limited portion of the project site. There is insufficient traffic volume projected for Clubhouse Drive to generate noise levels greater than 65 CNEL. Therefore, the proposed project would not be affected by traffic noise from Clubhouse Drive.

Noise levels were modeled for receivers located throughout the study area. Reference noise levels projected for the future traffic volumes on the area roadways at a distance of 50 feet from the centerline are provided in Table 4.6-1. Future projected noise contours over the Trails project site without mitigation are shown in Figure 4.6-1.

Ground-level receivers on lots adjacent to Otay Lakes Road and on those lots above Hunte Parkway and future Olympic Parkway could experience unattenuated future traffic noise levels over 65 CNEL. First-floor receivers on lots lower in elevation than Hunte

TABLE 4.6-1
EASTLAKE TRAILS REFERENCE NOISE LEVELS

Roadway	ADT	CNEL at 50 feet
Otay Lakes Road	38,500	77
Hunte Parkway at Otay Lakes Road	21,100	72
Hunte Parkway between North Greensview and Clubhouse Drive	11,200	70
Hunte Parkway between Clubhouse Drive and South Greensview	11,600	70
Hunte Parkway at Olympic Parkway	24,300	73
Olympic Parkway	27,000	74

FIGURE 4.6-1

Future Noise Contours without Mitigation - EastLake trails

RECON

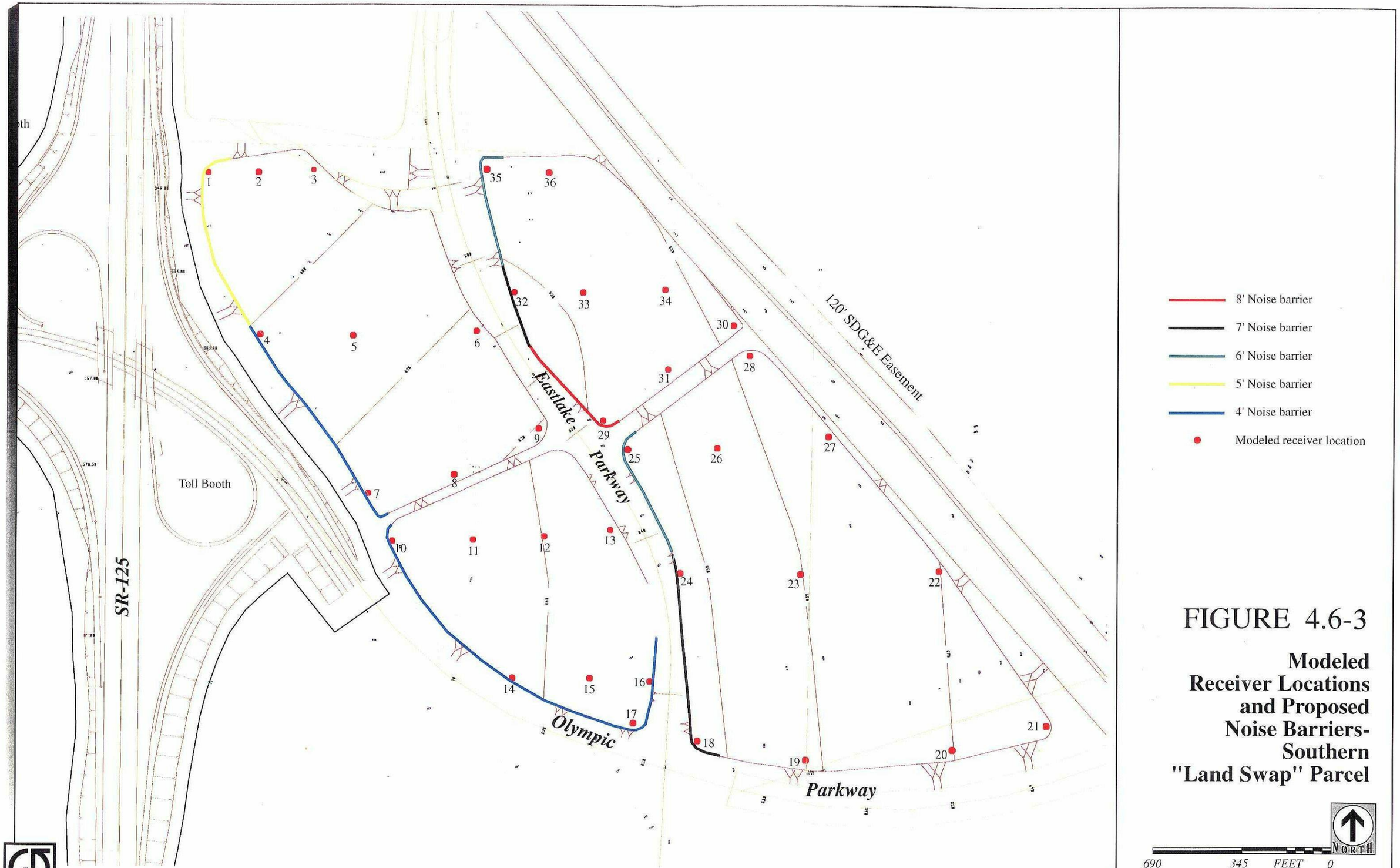


FIGURE 4.6-3

Modeled Receiver Locations and Proposed Noise Barriers- Southern "Land Swap" Parcel

Parkway are adequately protected and are predicted to be below the 65 CNEL standard. The school site (S-1) is also lower in elevation than Hunte Parkway and, therefore, is adequately protected from noise levels exceeding the standard.

There is the potential that second-floor exterior receivers adjacent to the roadways could be exposed to noise levels in excess of the City's 65 CNEL standard. Where exterior noise levels exceed 65 CNEL, interior noise levels could exceed the City's 45 CNEL interior noise standard.

The traffic volume for Otay Lakes Road provided in the traffic report and presented in this SEIR was generated assuming that Otay Lakes Road would be a four-lane Major roadway. In fact, Otay Lakes Road east of Hunte Parkway will be a six-lane Prime Arterial. A preliminary traffic assessment using the six-lane configuration has indicated a potential traffic increase on Otay Lakes Road. During the public review period of this SEIR, the traffic volume for Otay Lakes Road will be re-evaluated assuming the six-lane configuration. The corresponding noise levels along Otay Lakes Road could increase by approximately 1 decibel if the volumes go up by 10,000 ADT. This increase would not affect the impact analysis or recommended mitigation measures. It is unlikely that the increase would exceed 10,000 ADT.

Northern "Land Swap" Parcel

The northern "Land Swap" parcel is proposed for development as a nonresidential professional and administrative land use. Therefore, the 70 CNEL exterior noise standard applies to this parcel.

Noise levels were modeled for a series of ground-floor receivers to determine the locations of the projected future noise contours. The predicted noise contours, without mitigation (walls, berms, etc.), are shown in Figure 4.6-2.

As indicated previously, an SDG&E high-tension power line easement runs on-site along the parcel's eastern boundary. Because of the restriction on land use within power line easements, the only available use for the land within this easement would be for parking. No buildings or outdoor use areas would be allowed within the easement. Therefore, the 70 CNEL standard was not applied to the area within the SDG&E easement.

As seen from Figure 4.6-2, noise levels on the developable portions of the site are projected to be at or below 70 CNEL except immediately adjacent to Otay Lakes Road.

Southern "Land Swap" Parcel

The southern "Land Swap" parcel is proposed to be graded into four large pads: two pads east of EastLake Parkway and two pads west of EastLake Parkway. The two pads west of

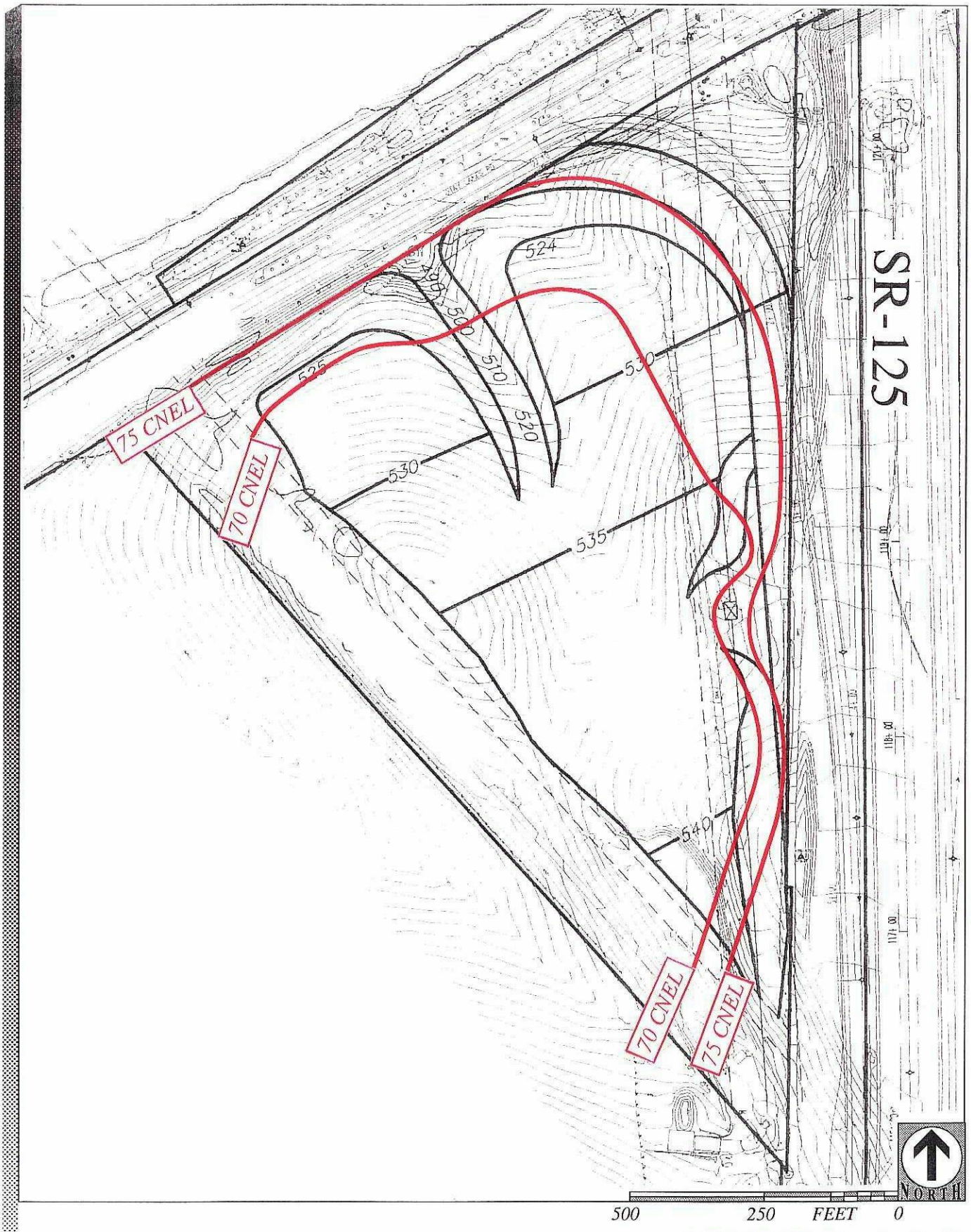


FIGURE 4.6-2

Future Noise Contours without Mitigation - North Land Swap Parcel

RECON

EastLake Parkway are proposed for development as a thoroughfare commercial land use. Therefore, these pads are subject to the 70 CNEL commercial exterior noise standard. The two pads east of EastLake Parkway are proposed for development as multi-family residential. Therefore, they are subject to the 65 CNEL residential exterior noise standard.

Noise levels were modeled for a series of 36 ground-floor receiver locations, as shown in Figure 4.6-3, to determine the locations of the projected future noise contours. The predicted noise contours, without mitigation, are shown in Figure 4.6-4.

Table 4.6-2 shows the predicted noise levels at the modeled receivers on the commercial pads without mitigation measures or shielding provided by future structures. As seen from this table, noise levels generally exceed the 70 CNEL standard along the western boundaries of the commercial pads adjacent to SR-125.

Table 4.6-3 shows the predicted noise levels at the modeled receivers on the residential pads without mitigation measures or shielding provided by future structures. As seen from this table, noise levels generally exceed the 65 CNEL standard along the western boundaries of the residential pads adjacent to EastLake Parkway.

Additionally, noise levels were projected for second-floor receivers on the residential pads for those receivers adjacent to the roadways. These second-floor noise levels are also shown in Table 4.6-3 and generally exceed 65 CNEL.

4.6.3 Level of Significance Prior to Mitigation

EastLake Trails

Noise impacts to the proposed project from traffic along Otay Lakes Road, Hunte Parkway, and Olympic Parkway would be a significant but mitigable impact.

Northern "Land Swap" Parcel

Projected noise levels in portions of the future commercial development would exceed City standards and could represent a significant noise impact if sensitive receivers are placed within the noise impacts areas.

Southern "Land Swap" Parcel

Projected noise levels in portions of the future commercial and residential pads would exceed City standards. This would be a significant, but mitigable, impact.

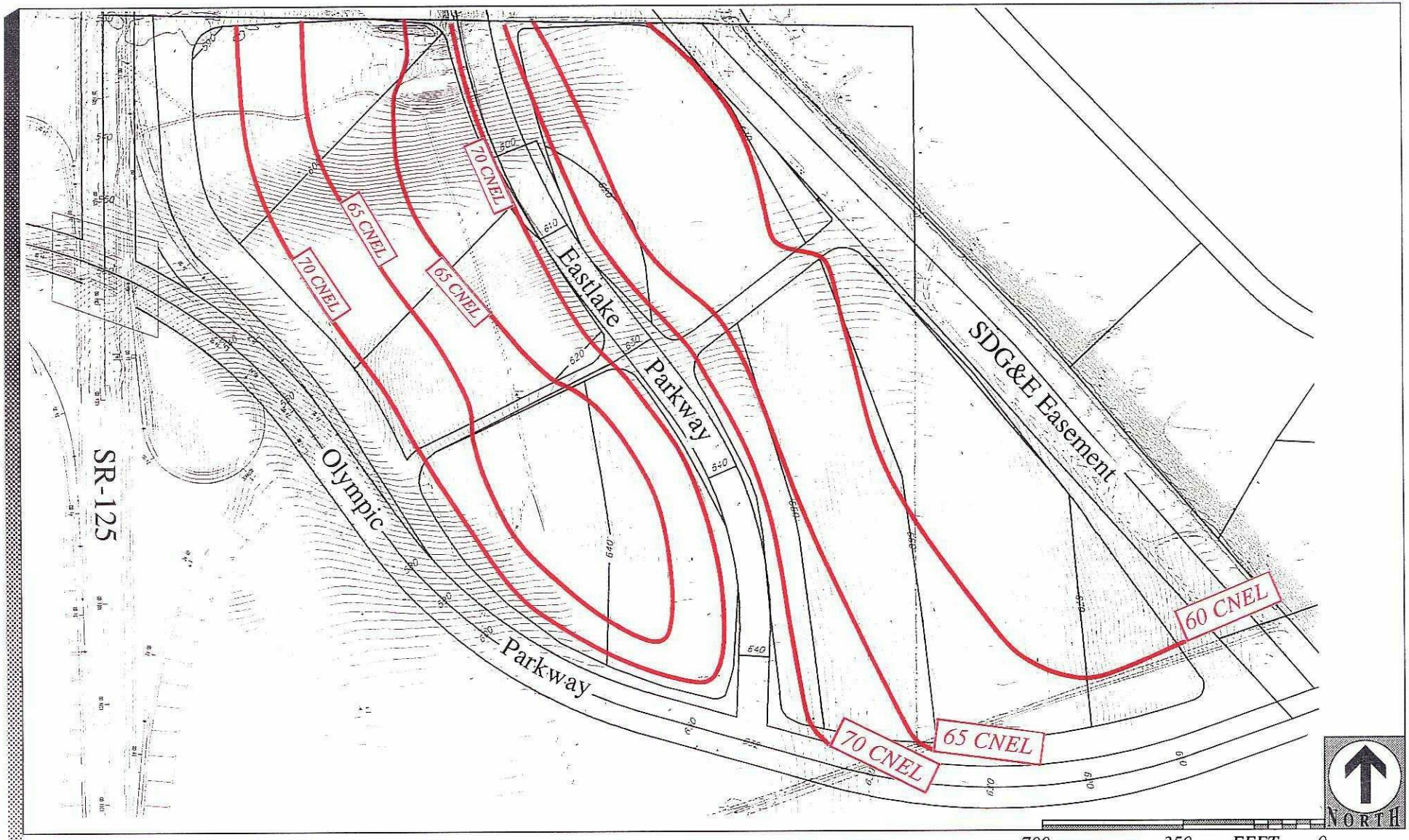


FIGURE 4.6-4

Future Noise Contours without Mitigation-South Land Swap Parcel

RECON

TABLE 4.6-2
SOUTHERN "LAND SWAP" PARCEL
COMMERCIAL PADS BUILDOUT NOISE LEVELS

Receiver Number	CNEL without Mitigation	CNEL with Mitigation
1	75	70
2	66	65
3	64	63
4	73	69
5	64	63
6	68	68
7	70	67
8	64	63
9	70	70
10	70	67
11	63	62
12	62	62
13	69	69
14	71	67
15	64	63
16	72	68
17	70	67

TABLE 4.6-3
SOUTHERN "LAND SWAP" PARCEL
RESIDENTIAL PADS BUILDOUT NOISE LEVELS

	Ground-floor Receivers		Second-floor Receivers	
Receiver Number	CNEL without Mitigation	CNEL with Mitigation	CNEL without Mitigation	CNEL with Mitigation
18	72	65	72	72
19	65	65	69	69
20	61	61	66	66
21	62	61	66	66
22	57	55	–	–
23	60	58	–	–
24	72	65	72	72
25	70	65	70	70
26	62	60	–	–
27	58	56	–	–
28	60	59	–	–
29	70	65	70	70
30	59	57	–	–
31	62	60	–	–
32	71	64	71	71
33	63	60	–	–
34	60	58	–	–
35	67	62	70	69
36	61	60	–	–

4.6.4 Mitigation Measures

EastLake Trails

4.6.4.1 Mitigation of potential first-floor exterior noise impacts to achieve the City's 65 CNEL exterior noise standard can be accomplished ~~achieved~~ through the construction of barriers as illustrated in Figure 4.6-5. The barriers should be either walls or berms—or a combination thereof—constructed of solid material with a density of at least four pounds per square foot and should not have any cracks or gaps. Examples of acceptable barrier materials include, but are not limited to, masonry block, wood frame with stucco, 0.5-inch-thick Plexiglas, or 0.25-inch-thick plate glass. If transparent barrier materials are used, no gaps should occur between the panels. Identification of appropriate noise attenuation measures sufficient to achieve City standards and to the satisfaction of the Director of Planning and Building shall be a condition of any tentative map approval.

4.6.4.2 Prior to approval of the tentative map for EastLake Trails, verification of the above mitigation based on detailed grading plans shall be required. In addition, if the projected traffic volume on Otay Lakes Road increases or if substantial changes in the proposed project grading occur as the final design develops through the tentative map process, additional noise analyses will be required.

4.6.4.3 Prior to the issuance of building permits, a detailed acoustical analysis shall be prepared by the applicant which demonstrates that second-floor interior noise levels due to exterior sources will be below the 45 CNEL standard. ~~At the time that building plans are available, and prior to the issuance of building permits, a detailed acoustical analysis will be required which demonstrates that second-floor interior noise levels due to exterior sources will be below the 45 CNEL standard. This study should demonstrate a 25-decibel reduction with the windows closed. No other mitigation measures are required.~~

Northern "Land Swap" Parcel

4.6.4.4 Noise levels on portions of the commercial pad are projected to exceed the City's 70 CNEL exterior noise standard. Detailed site plans or architecture plans have not been prepared as yet for the northern "Land Swap" site. Therefore, when site plans are available and prior to the issuance of building permits, an acoustical study shall be prepared. This study shall identify appropriate noise attenuation measures to the satisfaction of the Director of Planning and Building to ensure that the City's 70 CNEL standard is achieved. ~~Noise levels on portions of the commercial pad are projected to~~

6' Wall

5' Wall with transitions

4' Wall with transitions

FIGURE 4.6-5

Locations of Proposed Noise Barriers

~~exceed the City's 70 CNEL exterior noise standard. Therefore, significant noise impacts could occur if sensitive receivers are placed within the noise impact areas. Detailed site plans or architecture have not been prepared as yet for this site. Therefore, when detailed site plans are available, an acoustical study will be required prior to issuance of building permits to assure that potential noise impacts are adequately mitigated.~~

Southern "Land Swap" Parcel

4.6.4.5 For both the commercial and residential pads, mitigation of potential first-floor exterior noise impacts can be achieved through the construction of barriers as illustrated in Figure 4.6-3. The City's standard for commercial uses is 70 CNEL and 65 CNEL for residential uses. The barriers should be either walls or berms—or a combination thereof—constructed of solid material with a density of at least four pounds per square foot and should not have any cracks or gaps. Examples of acceptable barrier materials include, but are not limited to, masonry block, wood frame with stucco, 0.5-inch-thick Plexiglas, or 0.25-inch-thick plate glass. If transparent barrier materials are used, no gaps should occur between the panels. Identification of appropriate noise attenuation measures sufficient to achieve City standards and to the satisfaction of the Director of Planning and Building shall be a condition of any tentative map approval.

4.6.4.6 At the time that building plans are available, and prior to the issuance of residential building permits for the southern "Land Swap" parcel, a detailed acoustical analysis shall be required which demonstrates that second-floor interior noise levels due to exterior sources will be below the 45 CNEL standard.~~At the time that building plans are available, and prior to the issuance of building permits, a detailed acoustical analysis will be required which demonstrates that second-floor interior noise levels due to exterior sources will be below the 45 CNEL standard. This study should demonstrate a 27-decibel reduction with the windows closed.~~

4.6.5 Level of Significance After Mitigation

The above mitigation measures would reduce noise impacts for the EastLake Trails and EastLake "Land Swap" parcels to below a level of significance.

4.7 Cultural Resources/Paleontological Resources

The EastLake II project area has been subject to previous archaeological and historic site surveys. Archaeological resource investigations were prepared by Archaeological Planning Collaborative (APC) in 1980 and WESTEC in 1980 for the entirety of the EastLake project area. None of the three archaeological sites identified in these previous surveys are within the Eastlake Trails project area. In addition, impacts to the identified significant archaeological and prehistoric sites have been mitigated as described in the two previous Final EIRs which included the Eastlake Trails project site. An archaeological survey of the "Land Swap" parcels was prepared by RECON in 1989 as part of the archaeological survey for the Otay Ranch property. The results of this survey indicate that there are no significant archaeological resources on the "Land Swap" parcels. As such, the following discussion addresses the potential for paleontological resources on the project site. A paleontological assessment was prepared by Paleo Services in 1989 for the EastLake Trails property.

4.7.1 Existing Conditions

The Otay Formation underlies the EastLake Trails and "Land Swap" parcels (Geotechnics 1998). This formation is considered to possess high sensitivity for paleontological resources. During the mass excavation work for the initial phases at EastLake, abundant and well-preserved fossil remains of early vertebrate animals were unearthed and salvaged. The recovered EastLake fossils represent a very significant contribution to California paleontology. These fossils are all approximately 27-28 million years old and include remains of tortoises, lizards, birds, and a variety of mammals (e.g., shrews, rodents, saber cats, dogs, foxes, rhinos, camels, and oroedonts). The EastLake fossil deposits are considered to be the richest such deposits in California for late Oligocene (approximately 27-28 million years old) fossil vertebrates (City of Chula Vista 1989b).

The majority of the EastLake fossil remains were recovered from the Otay Formation with a few specimens from the underlying Sweetwater Formation. Over 45 collecting localities were recorded during grading for the EastLake I Hills and Shores residential developments and over 70 localities were recorded during grading for development of the EastLake Business Center. Based on past recovery of fossil remains for EastLake I, these formations in the project area could contain significant paleontological resources.

4.7.2 Impacts

Areas of the Otay Formation may be exposed during grading and construction activities. Exposure of this formation would likely result in the unearthing of fossil remains. If left uncollected the loss of these fossils would represent a significant impact.

4.7.3 Level of Significance Prior to Mitigation

No significant archaeological/historical resources have been identified in the past surveys of the project site and no mitigation measures would be required. However, given the potential for paleontological resources on the project site, the impact to these resources would be significant.

4.7.4 Mitigation Measures

The following mitigation measures are drawn from past efforts and have proven successful in protecting paleontological resources while allowing the timely completion of developments in San Diego and elsewhere in southern California.

4.7.4.1 Prior to issuance of a grading permit, the applicant shall confirm in writing ~~present a letter~~ to the City of Chula Vista ~~indicating~~ that a qualified paleontologist has been retained to carry out the ~~resource~~ mitigation described herein. A qualified paleontologist is defined as an individual with a M.S. or Ph.D. in paleontology or geology who is familiar with paleontological procedures and techniques. A paleontological monitor may be retained to perform the on-site monitoring in place of the qualified paleontologist. A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials and who is working under the supervision of a qualified paleontologist.

4.7.4.2 The qualified paleontologist or paleontological monitor shall attend the preconstruction meeting to consult with the grading and excavation contractors. The paleontologist's duties shall include monitoring of grading, salvaging, preparation of collected materials for storage at a scientific institution that houses paleontological collections, and preparation of a monitoring results report. These duties are defined as follows:

a. The paleontologist or paleontological monitor shall be on-site during the original cutting of previously undisturbed sediments of the Otay Formation to inspect cuts for contained fossils. The Sweetwater Formation should be monitored on an as-needed ~~half-time~~ basis as determined by the paleontologist or paleontological monitor. The frequency of inspections would depend upon the rate of excavation, the materials excavated, and the abundance of fossils. The paleontologist would work with the contractor to determine the monitoring locations and amount of time necessary to ensure adequate monitoring of the project site.

b. In the event that fossils are encountered, the paleontologist (or paleontological monitor) shall have the authority to divert or temporarily halt construction activities in the area of discovery to allow recovery of fossil remains in a timely fashion. Because of the potential for recovery of small fossil remains, it may be necessary to set up a screen-washing operation on-site.

c. Fossil remains shall be cleaned, sorted, repaired, cataloged, and then stored in a local scientific institution that houses paleontological collections, such as the San Diego Natural History Museum.

d. A monitoring results report with appropriate graphics summarizing the results (even if negative), analyses, and conclusions of the above program shall be prepared and submitted to the City of Chula Vista within 90 days following the termination of the paleontological monitoring program.

4.7.5 Level of Significance After Mitigation

Implementation of the above mitigation measures would mitigate potential paleontological impacts to a level of insignificance.

4.8 Air Quality

4.8.1 Existing Conditions

Meteorology/Climate

The project area, like the rest of San Diego County's coastal areas, has a cool semiarid steppe climate characterized by warm, dry summers and mild, wet winters. The local climate is influenced by the Pacific High Pressure Zone, which produces the prevailing westerly to northwesterly winds. In a high pressure system dry air descends from higher elevations to land and results in mild dry climate. During the fall and winter the high pressure system sometimes moves inland and centers over the Nevada-Utah area. This results in a few days of strong, dry hot northeasterly winds over the mountains towards the ocean. These winds from the east are referred to as Santa Anas. Santa Ana wind conditions can produce temperatures in excess of 90 degrees Fahrenheit (F) in the coastal cities during the fall months.

Strong Santa Anas tend to blow pollutants out over the ocean, producing clear days. However, at the onset or breakdown of these conditions, or if the Santa Ana is weak, air quality may be adversely affected. In these cases, emissions from the South Coast Air Basin to the north are blown out over the ocean, and low pressure over Baja California draws this pollutant-laden air mass southward. As the high pressure weakens, prevailing northwesterlies reassert themselves and send this cloud of contamination ashore in the San Diego Air Basin. There is a potential for such an occurrence about 45 days of the year, but San Diego is adversely affected on only about five of them. When this impact does occur, the combination of transported and locally produced contaminants produces the worst air quality measurements recorded in the basin.

Winds in the City of Chula Vista are almost always driven by the dominant land/sea breeze circulation system. Regional wind patterns are dominated by daytime on-shore sea breezes of up to 20 miles per hour with an average of seven miles per hour. At night, the wind generally slows and reverses direction, traveling towards the sea. Wind direction is altered by local canyons, with winds tending to flow parallel to the canyons.

The on-shore flow of air provides the driving mechanism for both air pollution transport and dispersion. The winds described above control the horizontal transport in the region. The interior valleys of San Diego County also have numerous temperature inversions that control the vertical extent through which pollutants can be mixed. When the on-shore flow of cool, marine air undercuts a large dome of warm, sinking air within the oceanic high pressure area, it forms a marine/subsidence inversion. These inversions allow for good local mixing, but act like a giant cover over the larger area. As air moves inland, sources add pollution from below without any dilution from above. The boundary between the cool air near the surface and the warm air aloft is a zone where air pollutants

become concentrated. As the air moves inland and meets elevated terrain, inland foothill communities are exposed to many of the trapped pollutants within this part of the inversion layer.

A second inversion type forms when cool air drifts into lower valleys at night and pools on the valley floor. These radiation inversions are strongest in winter when nights are longest and air is coldest. They may lead to stagnation of ground-level pollution sources such as automobile exhaust near freeways or major parking facilities.

The EastLake II project area is approximately 7.5 miles inland from the Civic Center of Chula Vista. This area is in the coastal plain physiographic province and experiences the steppe-like climate conditions typical of San Diego County coastal areas. The mean monthly temperature is approximately 56 degrees F in the winter and 68 degrees F during the summer months. The mean temperature in Chula Vista is approximately 62 degrees F. Summers are typically dry with an average of 10.3 inches of rain each year from November to April measured at Lower Otay Reservoir, which is the nearest climate station to the project area.

Because coastal areas experience fresh breezes during the daytime, areas like Chula Vista generally do not experience the same frequency of air pollution problems found in some areas east of San Diego. Unhealthful air quality may occur at times in summer during limited localized stagnation, but occurs mainly in conjunction with the occasional intrusion of polluted air from the Los Angeles Basin (South Coast Air Basin) into the County.

Localized elevated pollution levels may also occur in the winter during calm stable conditions near freeways, shopping centers, or other major traffic sources, but such clean air violations are highly localized in space and time and would not be found at the project site. Except for the occasional interbasin transport, air quality in the project vicinity is expected to be good.

4.8.2 Regulatory Framework

Federal Regulations

The federal Clean Air Act was enacted in 1970 and amended in 1977 and 1990 [42 U.S.C. 7506(c)] for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity.

In 1971, in order to achieve the purposes of Section 109 of the act, the Environmental Protection Agency (EPA) developed primary and secondary national ambient air quality standards (NAAQS). Six pollutants of primary concern were designated: ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, lead, and suspended particulates (PM-10).

The primary NAAQS must, ". . . allowing an adequate margin of safety . . . protect the public health" and the secondary standards must "protect the public welfare from any known or anticipated adverse effects" (1990 Clean Air Act, Section 109).

"Public welfare" includes tangible and intangible things such as aesthetics, agriculture, and architecture. The primary standards were established, with a margin of safety, considering long-term exposures for the most sensitive groups in the general population (i.e., children, senior citizens, and people with breathing difficulties).

If an air basin is not in federal attainment for a particular pollutant, the basin is classified as marginal, moderate, serious, severe, or extreme. Additionally, under San Diego's current federal classification as a serious nonattainment area for ozone, the Clean Air Act specifies several requirements, including (County of San Diego 1995):

- Federal ozone standard attainment by 1999 and a demonstration that the State Implementation Plan (SIP) provides for attainment.

- Emissions reduced 15 percent between 1990 and 1996 and reduced 3 percent each year thereafter until attainment.

- Transportation control measures if vehicle travel and emissions exceed attainment demonstration levels.

The EPA allows the states the option to develop different (stricter) standards, which California has adopted. Table 4.8-1 lists the federal and California state standards.

State Regulations

As discussed above, the State of California has set limits that are more stringent on the six pollutants of national concern (see Table 4.8-1).

Assembly Bill (AB) 2595 became effective on January 1, 1989, and requires that districts implement regulations to reduce emissions from mobile sources through the adoption and enforcement of transportation control measures. As a state serious ozone nonattainment area, San Diego is subject to various requirements including (County of San Diego 1995):

- Five percent annual reduction in hydrocarbons and oxides of nitrogen emissions from 1987 until standards are attained. If this five-percent reduction cannot be obtained, every feasible measure must be implemented.

- Transportation control measures to achieve an average of 1.4 persons per passenger vehicle during weekday commute hours by 1999 or programs providing equivalent emission reductions not otherwise required.

TABLE 4.8-1
AMBIENT AIR QUALITY STANDARDS

Pollutant	State Standard*	Federal Standard*
Oxidant (ozone)	0.09 ppm (180 µg /m^3) 1hr.	0.12 ppm (235 µg /m^3) 1 hr.
Carbon monoxide	9.0 ppm (10 mg/m3) 8 hr.	9 ppm (10 mg/m3) 8 hr.
Carbon monoxide	20 ppm (23 mg/m3) 1 hr.	35.0 ppm (40 mg/m3) 1hr.
Nitrogen dioxide	0.25 ppm (470 µg /m^3) 1 hr.	0.053 ppm (100 µg /m^3) Annual Average
Sulfur dioxide	0.25 ppm (655 µg /m^3) 1 hr.	0.03 ppm (80 µg /m^3) Annual Average
Sulfur dioxide	0.04 ppm (105 µg /m^3) 24 hr.	0.14 ppm (365 µg /m^3) 24 hr.
Suspended particulate matter (PM-10)	50 µg /m^3 24 hr.	150 µg /m^3 24 hr.
Suspended particulate matter (PM- 10)	30 µg /m^3 Annual Geometric Mean	50 µg /m^3 Annual Arithmetic Mean
Lead	1.5 µg /m^3 30-day Average	1.5 µg /m^3 Calendar Quarter

SOURCE: State of California 1995.

*Maximum concentration averaged over specified time period.

ppm = parts per million; mg = milligram per cubic meter; µg /m^3 = micrograms per cubic meter.

State Implementation Plan

The SIP is the document that sets forth the state's strategies for achieving air quality standards. The San Diego Air Pollution Control District (APCD) is responsible for preparing and implementing the portion of the SIP applicable to the San Diego Air Basin (SDAB). The San Diego APCD adopts rules, regulations, and programs to attain state and federal air quality standards and appropriates money (including permit fees) to achieve these objectives.

California Environmental Quality Act

Section 15125(b) of the CEQA Guidelines contains specific reference to the need to evaluate any inconsistencies between the proposed project and applicable general plans and regional plans. Regional plans include the applicable air quality management plan, which is the Regional Air Quality Strategy (RAQS) in the San Diego Air Basin (SDAB).

Local Regulations

The San Diego Air Pollution Control District (APCD) is the agency that regulates air quality in the SDAB. The APCD prepared the 1991/1992 RAQS in response to the requirements set forth in AB 2595. The draft was adopted, with amendments, on June 30, 1992 (County of San Diego 1992). Attached as part of the RAQS are the transportation control measures (TCM) for the air quality plan prepared by the San Diego Association of Governments (SANDAG) in accordance with AB 2595 and adopted by SANDAG on March 27, 1992, as Resolution Number 92-49 and Addendum. The required triennial update of the RAQS and corresponding TCM were adopted on December 12, 1995. The RAQS and TCM Plan set forth the steps needed to accomplish attainment of state and federal ambient air quality standards.

The APCD has also established a set of Rules and Regulations initially adopted on January 1, 1969, and periodically reviewed and updated. The Rules and Regulations define requirements regarding stationary sources of air pollutants and fugitive dust.

4.8.3 Existing Air Quality

The project area is within the San Diego Air Basin. The existing air quality for the Chula Vista area is monitored by the State Air Resources Board at the Chula Vista monitoring station located approximately five miles west of the project area at 80 East J Street. This is the closest air monitoring station to the project area and is assumed to be representative of the air quality at the site.

Air quality is commonly expressed as the number of days in which air pollution levels exceed state standards set by the California Air Resources Board (CARB) and federal

standards set by the EPA (see Table 4.8-1). The ambient air quality for the last five years measured at the Chula Vista monitoring station is summarized in Table 4.8-2.

Ozone

The air basin is currently designated a state "serious" nonattainment area and a federal "serious" nonattainment area for ozone. Peak ozone concentrations have steadily declined since 1978 (as reported by SANDAG's 1994 Regional Transportation Plan). In 1994, San Diego exceeded the state standard for ozone on 79 days compared with 158 in 1989. Federal standards were exceeded on 9 days compared with 55 days in 1989 (County of San Diego 1995). Of the nine monitoring stations in the SDAB which monitor ozone, only the mountain slopes station at Alpine exceeded the federal air quality standard for ozone in 1994. This was the first time that just a single station has exceeded federal standards since air quality monitoring began in 1955 (County of San Diego 1995). However, the federal standard was exceeded at six of the monitoring stations during 1995.

Ozone presents special control strategy difficulties in the SDAB because of climatological and meteorological factors. Ozone is the end product of a chain of chemical reactions that produces photochemical smog from hydrocarbon emissions. A major source of hydrocarbon emissions is motor vehicle exhausts. In the SDAB, only part of the ozone contamination is derived from local sources; under certain conditions, contaminants from the South Coast Air Basin (such as the Los Angeles area) are windborne over the ocean into the SDAB. When this happens, the combination of local and transported pollutants produces the highest ozone levels measured in the basin.

In 1992, pollution transported from the Greater Los Angeles area was responsible for 11 out of 19 days over federal standards. On average, approximately 42 percent of the days over state standards since 1987 were attributable to pollution transported from Los Angeles (SANDAG 1994:249-250). Although during 1994 ozone concentrations in San Diego County exceeded the federal ozone air quality standard on nine days, on only two of those days was the peak ozone concentration attributed primarily to emission sources within San Diego County. On the other seven days, ozone transported into San Diego from the South Coast Air Basin was a significant factor (County of San Diego 1995).

Local agencies can control neither the source nor the transportation of pollutants from outside the basin. The APCD's policy, therefore, has been to control local sources effectively enough to reduce locally produced contamination to clean air standards. The 1994 Regional Transportation Plan concludes that ozone remains the major primary pollutant in the San Diego region.

TABLE 4.8-2
NUMBER OF DAYS AIR QUALITY STANDARDS WERE EXCEEDED AT CHULA VISTA MONITORING STATION

Pollutant	Year				
	1992	1993	1994	1995	1996
Ozone					
Federal 1-hour standard (0.12 ppm, 235 $\mu g/m^3$)	4	1	NR	1	NR
State 1-hour standard (0.09 ppm, 180 $\mu g/m^3$)	14	12	4	7	1
Carbon Monoxide					
Federal 8-hour average (9 ppm, 10 mg/m^3)	0	0	0	0	0
State 8-hour average (9.0 ppm, 10 mg/m^3)	0	0	0	0	0
State 1-hour average (20 ppm, 23 mg/m^3)	0	0	0	0	0
Nitrogen Dioxide					
Federal annual average (0.053 ppm, 100 $\mu g/m^3$)‡	0.022	0.020	0.021	0.020	0.020
State 1-hour standard (0.25 ppm, 470 $\mu g/m^3$)	0	0	0	0	0
Sulfur Dioxide					
Federal annual average (0.03 ppm, 80 $\mu g/m^3$)‡	0.002	0.001	0.001	0.001	0.002
State 1-hour average (0.25 ppm, 655 $\mu g/m^3$)	0	0	0	0	0
State 24-hour average (0.04 ppm, 105 $\mu g/m^3$)	0	0	0	0	0
Suspended 10-micron particulate matter (PM-10)					
Federal 24-hour average (150 $\mu g/m^3$)†	0/60	0/60	0/60	0/59	0/60
Federal annual arithmetic mean (50 $\mu g/m^3$)‡	29.0*	27.0	28.0	32.4	27.2
State 24-hour average (50 $\mu g/m^3$)†	2/60	2/60	2/60	5/59	2/60
State annual geometric mean (30 $\mu g/m^3$)‡	27.4*	24.7	26.5	29.2	25.8
Lead					
Federal calendar quarter average (1.5 $\mu g/m^3$)‡	NR	NR	NR	NR	NR
State 30-day average (1.5 $\mu g/m^3$)‡	NR	NR	NR	NR	NR

SOURCE: State of California 1992, 1993, 1994, 1995, 1996

ppm - parts per million
mg/m^3 - milligrams per cubic meter
$\mu g/m^3$ - micrograms per cubic meter
NR - not reported at this station
*Data points are valid, but an insufficient number were collected to meet EPA and/or CARB representative criteria.
†Number of samples over standard/number of samples collected.
‡Data shown is in $\mu g/m^3$.

Carbon Monoxide

No violations of the state standard have been recorded for carbon monoxide since 1991 and the basin is classified as a state attainment area for carbon monoxide. The basin currently is classified as a federal nonattainment area for carbon monoxide; however, no violations of the federal standard have been recorded since 1989. The APCD plans to apply to the EPA for reclassification of the basin to a federal attainment area for carbon monoxide, but has not initiated the process (County of San Diego 1997). Moreover, it should be noted that the state standard for carbon monoxide is more stringent than the federal standard.

Particulates (PM-10)

Particulates within the respirable range (10 microns in size or less) are reported as both an annual average and a 24-hour average. The basin overall is currently in attainment of the federal standard, although the basin is unclassified for inhalable particulates (County of San Diego 1995). However, the basin has not met the more stringent state standard. For several reasons hinging on the area's dry climate and coastal location, the SDAB has special difficulty in developing adequate tactics to meet present state particulate standards.

Nitrogen Dioxide, Sulfur Dioxide, and Lead

The basin is in attainment for these pollutants.

4.8.4 Standards and Criteria

California Air Resources Board Guidelines

For long-term emissions, the direct impacts of a project can be measured by the degree to which the project is consistent with regional plans to improve and maintain air quality. The regional plan for San Diego is the 1991/1992 RAQS and attached TCM Plan as revised by the triennial update adopted on December 12, 1995. The CARB provides criteria for determining a project's impacts (State of California 1989), which include the following:

1. Is a regional air quality plan being implemented in the project area?
2. Is the project consistent with the growth assumptions in the regional air quality plan?
3. Does the project incorporate all feasible and available air quality control measures?

City of Chula Vista

The goal for air quality is "to maintain and improve the ambient air quality enjoyed by the citizens of Chula Vista." The standard threshold states that "the City shall annually provide the San Diego Air Pollution Control District (APCD) with a 12- to 18-month development forecast and request an evaluation of its impact on current and future air quality management programs, along with recent air quality data.

4.8.5 Impacts

Local Air Quality

During the construction phase of the EastLake Trails project, short-term emissions of several types of air pollutants would occur. Dust would be generated and the combustion of fossil fuels by construction equipment would create emissions. In addition, clearing, earth movement, and travel on unpaved surfaces can create considerable quantities of fugitive dust.

Construction dust is comprised primarily of chemically inert particles which are too large to enter the human respiratory tract when inhaled. Although air quality impacts resulting from construction-related emissions are potentially significant, they are considered short term in duration since construction is a relatively short-term, one-time activity.

Long-term emissions of air pollutants occur from both stationary and mobile sources. Stationary source pollutant emissions include those generated by the consumption of natural gas and electricity for space and water heating and the burning of wood in residential fireplaces. Vehicle travel associated with EastLake Trails would generate mobile source emissions including carbon monoxide, nitrogen oxides, and hydrocarbons.

Regional Impacts

The long-term local emissions of stationary and mobile source air pollutants generated from the proposed project may contribute to regional air quality degradation. Stationary sources are expected to generate criteria pollutants such as hydrocarbons, nitrogen oxides, sulfur dioxide, carbon monoxide, and particulates. Vehicular traffic would also contribute carbon monoxide, nitrogen oxides, and hydrocarbons to the local air shed. The level of pollutants emitted from vehicles is dependent on trip generation rates and trip lengths.

Conformance with Regional Plans

EastLake Trails and the "Land Swap" parcels are in the city of Chula Vista, which is within the San Diego Air Basin. The 1991/1992 RAQS, as revised by the required 1994

triennial update, are being implemented by APCD throughout the air basin. Therefore, the proposed project fulfills the first criteria from the CARB guidelines described in Existing Conditions above.

Normally, if a project is consistent with the City's General Plan, it can be considered consistent with the growth assumptions in the RAQS (State of California 1989). The proposed project is consistent with Chula Vista's General Plan. Therefore, the proposed project is considered consistent with the growth assumptions in the RAQS.

Therefore, the proposed project is consistent with the goals and objectives of the RAQS.

4.8.6 Level of Significance Prior to Mitigation

Construction-Related Impacts

The proposed project would generate sufficient emissions and dust during construction-related activities to result in a short-term significant, but mitigable, impact to air quality.

Project-Related Impacts

The proposed project is consistent with the goals and objectives of the RAQS. Therefore, implementation of the proposed project will not result in any significant direct air quality impacts.

However, because the SDAB is nonattainment for ozone and PM-10, the incremental increase in air pollutants generated from the project combined with air quality impacts from surrounding projects will result in a cumulatively significant impact to the air quality in the San Diego Air Basin.

4.8.7 Mitigation Measures

Construction-Related Impacts

Dust control during grading operations would be regulated in accordance with the rules and regulations of the San Diego APCD. At the time tentative maps are approved for the project, the following measures would be required to reduce fugitive dust impacts and emissions impacts from construction equipment:

4.8.7.1 All unpaved construction areas shall be sprinkled with water or other acceptable San Diego APCD dust control agents during dust-generating activities to reduce dust emissions. Additional watering or acceptable APCD

dust control agents shall be applied during dry weather or windy days until dust emissions are not visible.

4.8.7.2 Trucks hauling dirt and debris shall be properly covered to reduce windblown dust and spills.

4.8.7.3 Enforce a 20-mile-per-hour speed limit on unpaved surfaces.

4.8.7.4 On dry days, dirt and debris spilled onto paved surfaces shall be swept up immediately to reduce resuspension of particulate matter caused by vehicle movement. Approach routes to construction sites shall be cleaned daily of construction-related dirt in dry weather.

4.8.7.5 On-site stockpiles of excavated material shall be covered or watered.

4.8.7.6 Disturbed areas shall be hydroseeded, landscaped, or developed as quickly as possible and as directed by the City to reduce dust generation.

4.8.7.7 Heavy-duty construction equipment with modified combustion/fuel injection systems for emissions control shall be utilized during grading and construction activities. Catalytic reduction for gasoline-powered equipment shall be used. Also, equip construction equipment with prechamber diesel engines (or equivalent) together with proper maintenance and operation to reduce emissions of nitrogen oxide, to the extent available and feasible.

4.8.7.8 Use low pollutant-emitting construction equipment.

4.8.7.9 Use electrical construction equipment, to the extent feasible.

4.8.7.10 The simultaneous operations of multiple construction equipment units shall be minimized (i.e., phase construction to minimize impacts).

Incorporation of these measures, combined with the fact that construction is a one-time short-term activity, will reduce potentially significant air quality impacts to below a level of significance.

Project-Related Impacts

No long-term direct air quality impacts are anticipated. No mitigation for cumulatively significant air quality impacts is available other than compliance with the goals and objectives of the RAQS.

4.8.8 Level of Significance After Mitigation

Implementation of the above mitigation measures for construction-related impacts would reduce potentially significant air quality impacts to below a level of significance.

No significant direct air quality impacts are anticipated with implementation of the proposed project since the project is consistent with the goals and objectives of the RAQS. However, because the SDAB is not in conformance with ozone and PM-10 criteria, the contribution made by the proposed project represents a small, but significant cumulative air quality impact after mitigation.

4.9 Public Facilities

4.9.1 Existing Conditions

The following discussions on water (potable and reclaimed) and sewer service are based on several technical reports prepared for the project applicant. These reports include a Subarea Master Plan for EastLake Trails and the "Land Swap" Areas (Powell and Associates, September~~May~~ 1998), Sewer Report for the "Land Swap" Parcels (P&D Consultants, Inc., June 1998), and The Trails Wastewater Master Plan (Dudek and Associates, August~~June~~ 1998). These technical reports are included as Appendixes H, I, and J to this SEIR.

OWD, response #2

Water

The County of San Diego imports most of its potable water supply from the Colorado River via the Colorado River Aqueduct, and the Sacramento-San Joaquin Delta via the California Aqueduct of the State Water Project. The rest is from local surface water storage reservoirs, groundwater, and water reclamation.

The San Diego County Water Authority (CWA) purchases the imported water from the Metropolitan Water District of Southern California (MWD) and is the wholesaler of water to 23 water agencies in San Diego County, including the Otay Water District (OWD).

The OWD obtains filtered water from CWA's water Pipeline No. 4 of the Second San Diego Aqueduct. Water supplied from this pipeline is treated at the MWD's Skinner Filtration Plant located in Riverside County. Pipeline No. 4 replaced Pipeline No. 3 for delivery of filtered water. Pipeline No. 3 is currently in service for the transport of raw water to local open storage reservoirs and water treatment facilities (Ahles 1998).

EastLake Trails and the "Land Swap" parcels are located within the OWD's Central Service Area. The Trails property is incorporated in Improvement District (ID) 27 and is required to annex into ID 22 prior to establishment of permanent water service. The "Land Swap" parcels are required to annex into ID 22 and ID 27 prior to establishment of permanent water service (Powell & Associates, Inc. 1998).

The project area would receive its water supply from the Otay Water District's Central System. Currently, the water supply for the Central System is taken from the No. 10 and No. 12 connections to Pipeline No. 4. (Ahles 1998). The water supply is conveyed by gravity from Connection No. 10 through a 24-inch transmission main to the 30 million gallon (mg) 624-3 (EastLake Greens) reservoir, and is planned to feed into the 12.4 mg 624-1 (Patzig) reservoir. The water supply from Connection No. 12 is conveyed by gravity through a 36-inch water transmission main to the 8 mg 624-2 reservoir (Peasley

1998). Water is then delivered from the 624-1, 624-2, and 624-3 reservoirs by gravity to the 624 Zone (OWD 1995).

Potable water for EastLake Trails and the "Land Swap" parcels would be supplied by the 711 and 980 pressure zones within the Central System. These zones are supplied by pumping from the 624 Zone. The Central Area Pump Station (711-1) takes water from the 624-1 reservoir and discharges to the 711-1 and 711-2 reservoirs which supply the 711 pressure zone. The total capacity of the two 711 reservoirs is 5.0 mg. The EastLake Pump Station takes water from the 711 distribution piping and discharges to the 980-1 and 980-2 reservoirs which supply the 980 Pressure Zone. The total capacity of the two 980 reservoirs is 10.0 mg.

Currently, the total capacity of the Central Area Pump Station (711-1) is 12,000 gallons per minute (gpm) and the total capacity of the EastLake Pump Station is 8,000 gpm.

Existing water transmission mains for the 980 and 711 pressure zones are located in Hunte Parkway, EastLake Parkway, and Otay Lakes Road. The Trails would connect with the existing 980 and 711 transmission mains in Hunte Parkway and Otay Lakes Road. The northern "Land Swap" parcel would connect to existing 711 water lines in Otay Lakes Road. The southern "Land Swap" parcel would connect to an extension of the existing 980 Zone water line within EastLake Parkway (Powell 1998).

Recycled Water

The OWD owns and operates the Ralph W. Chapman Water Recycling Facility located near the intersection of Singer Lane and Highway 94. This plant produces up to 1.3 million gallons of recycled water for non-potable water uses such as irrigation of golf courses, school playing fields, public parks, and public landscaping. Supplemental recycled water supply will be available from the City of San Diego's proposed 6 million gallons per day (mgd) capacity South Bay Water Reclamation Plant, which will be located in the Tijuana River Valley at Monument and Dairy Mart Roads near the Mexican border. This plant is scheduled to go on line by the year 2001.

Recycled water is delivered to storage ponds located in the District Use Area north of Proctor Valley Road at a maximum elevation of approximately 950 feet. EastLake Trails would receive recycled water from the existing 950 Zone distribution system via existing recycled water mains in Otay Lakes Road and Hunte Parkway.

Supplemental recycled water supply would be available from the City of San Diego's proposed 7 mgd capacity South Bay Water Reclamation Plant which will be located in the Tijuana River valley near the Mexican border. Deliveries to the District would be pumped up to the proposed 680 Zone Recycled Reservoir to be located in EastLake

Greens. The District would have the option of pumping recycled water from the 680 Zone reservoir to supply the 950 Zone demands.

The northern "Land Swap" parcel would receive recycled water from a connection to the planned 950 Zone main in Otay Lakes Road. The southern "Land Swap" parcel would receive recycled water supply from connections to the planned 950 Zone recycled water transmission mains in EastLake Parkway and the future Olympic Parkway. Recycled water requirements for the project would be coordinated by the Otay Water District and the City of Chula Vista. The phased construction of recycled water facilities, based on the District-approved master plan, would be incorporated into the Public Facilities Financing Plan and/or subdivision map conditions to assure timely provision of required facilities.

Sewer Services

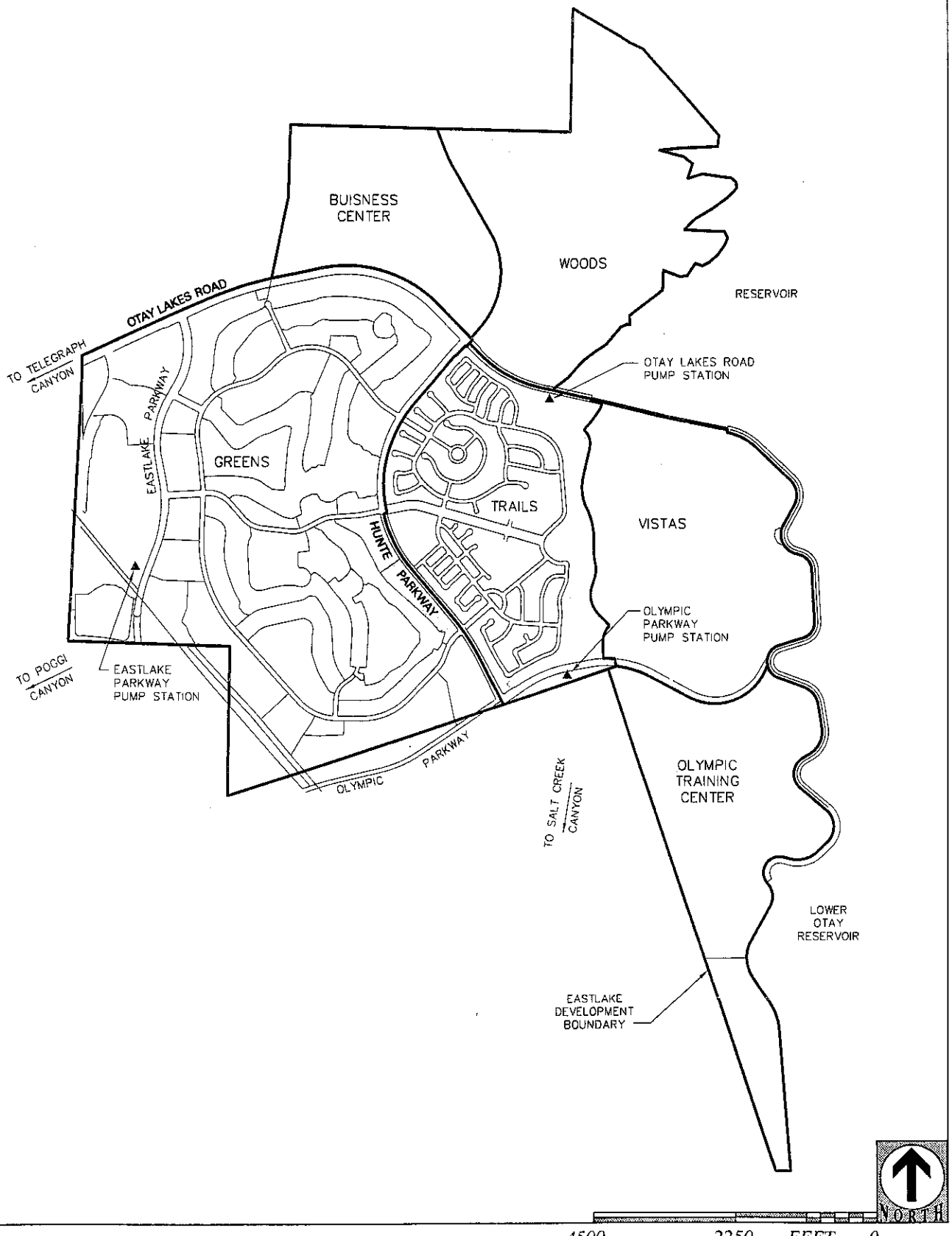
The City of Chula Vista is responsible for sewer service in the EastLake Trails and "Land Swap" project areas. The City of Chula Vista holds capacity rights of 19.3 mgd in the San Diego Metropolitan Sewerage System (Metro). The City's current average wastewater flow into the Metro system is 11.6 mgd (Davies 1998). Chula Vista has approximately 7.7 mgd remaining available capacity in the Metro Sewer. The Metro system treats its sewage at the Point Loma Sewage Treatment Plant.

The City of Chula Vista has threshold standards for sewer services. The threshold standards require all new developments to be consistent with the Sewer Master Plan and City Engineering Standards, and the sewage flows and volumes must not exceed City Engineering Standards.

EastLake Trails

The EastLake Trials site is located in the Salt Creek drainage basin. At present, no sewer facilities exist near the project site in the Salt Creek basin. The wastewater conveyance systems in Salt Creek are not complete and existing wastewater flow from existing development are pumped via pump stations to the Telegraph Canyon collection system. Figure 4.9-1 shows the location of the existing pump stations. Extension of trunk sewer facilities to serve the Salt Creek basin area by gravity flow are planned as a part of the Otay Ranch project. Until the trunk sewer facilities are extended, interim pumping of project flows north to facilities in Telegraph Canyon Basin is proposed.

The trunk facilities in the Telegraph Canyon Basin currently convey pumped flows from EastLake Greens and the Olympic Training Center via three pump stations, and are proposed to accommodate interim flows from other planned projects. These three pump stations include the Otay Lakes Road, Olympic Parkway, and EastLake Parkway Pump Stations, and are considered to be temporary until such time as downstream infrastructure



Source: Dudek & Associates 1998

FIGURE 4.9-1
Existing EastLake Sewer Pump Stations

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has been completed. Specifically, Otay Lakes Road Pump Station and the Olympic Parkway Pump Station were both designed as temporary pump stations, for the purpose of lifting wastewater into the existing Telegraph Canyon Interceptor. At the time of construction of these pump stations, it was anticipated that the Salt Creek Canyon Interceptor line would be completed before the pump stations reached their design capacity. However, development tributary to the Salt Creek Canyon Interceptor was delayed while development has expanded. These conditions will necessitate that these two pump stations be upgraded as part of the EastLake Trails project.

The City has established a flow monitoring program and financing plan for the Telegraph Canyon Basin to assure facilities can continue to accommodate pumped flows. EastLake Trails would be required to participate in this program. EastLake Trails would also participate in the Salt Creek Gravity Basin Sewer Plan established by the City.

"Land Swap" Parcels

The "Land Swap" parcels are located in the Poggi Canyon drainage basin. The northern "Land Swap" parcel would be served by the existing 15-inch trunk sewer at Otay Lakes Road. The southwestern corner of EastLake Greens and the adjacent southern "Land Swap" parcel drain naturally to Poggi Canyon down Olympic Parkway.

The EastLake pump station is capable of pumping an average 382,508 gallons per day of wastewater. This pump station was sized to accommodate the ultimate Poggi Canyon sewage flows within EastLake Greens, which does not include the "Land Swap" parcels. Development of the "Land Swap" properties is expected to occur after construction of the Poggi Canyon Trunk Sewer is completed.

Educational Facilities

The Chula Vista Elementary School District (CVESD) serves the EastLake II planning area for grades kindergarten through sixth grade (K-6) and the Sweetwater Union High School District (SUHSD) serves the area for middle schools (7-8) and high schools (9-12). Existing schools operated by the Chula Vista Elementary School District in the project area include EastLake Elementary, which is located on Hillside Drive, one-quarter mile north of East H Street; and Olympicview Elementary, which is located on South Greensview Drive, south of Clubhouse Drive, to the east of EastLake High School.

The schools servicing the project area and their current capacities are shown in Table 4.9-1. The fall 1997 enrollment for EastLake Elementary was 810 students with an enrollment capacity of 820. EastLake Elementary is operating almost at capacity with room for only 23 more kindergarten students. EastLake elementary has 11 portable classrooms on the premises that are being used for third and fourth grade students (Swift 1997).

TABLE 4.9-1
SCHOOLS SERVICING THE PROJECT AREA

School	Grades	October 1997 Enrollment	Capacity	Remaining Capacity
EastLake Elementary School	K-6	810	820	+23 K only
Olympicview Elementary School	K-6	721	743	+22
Rancho del Rey Middle School	7-8	289	750[1]/1400[2]	
EastLake High School	9-12	1,831	2600	+769

[1]The expected capacity in July 1998.
[2]The capacity at school completion.

Olympicview Elementary had an October 1997 student enrollment of 721 and an enrollment capacity of 743. Olympicview is operating almost at capacity with room for 22 more students from various grade levels. They are using eight portable classrooms on the premises (Rossi 1997).

The Sweetwater Union High School District serves the EastLake II area for grades 7-12. The school district has one high school and one middle school in the project area: EastLake High School located on EastLake Parkway; and Rancho del Rey Middle School (7-8), which is temporarily housed on the EastLake High School property while the school is under construction.

The fall 1997 enrollment at EastLake High School was 1,831 against a total school site capacity of 2,400 (Wright 1998). Rancho del Rey Middle School had an fall 1997 enrollment of 279 and was operating temporarily on the EastLake High School campus. Currently, Rancho del Rey houses students from two feeder schools: Olympicview and EastLake Elementary as well as Chula Vista Hills and Discovery Elementary. The actual Rancho del Rey Middle School is projected to open Phase I in fall 1998 with an initial student capacity of 750. At completion, the student housing capacity will serve 1,400 students (Wright 1998).

Parks and Recreation

New development is required to provide public parkland, improved to City standards, and dedicated to the City, based on established standards (Section 17.10.040 of the Chula Vista Municipal Code). The City of Chula Vista has developed a goal to provide a diverse and flexible park system that meets both the active and passive recreational needs of the citizens of Chula Vista. To meet this goal, the City set a threshold standard

requiring that three acres of neighborhood and community parkland with appropriate facilities be provided per 1,000 residents east of I-805.

The Chula Vista General Plan and the Eastern Territories Area Plan includes a total of nine community parks that are connected by an open space and trail system that extends throughout the Eastern Territories. EastLake Greens has an existing 15.1-acre community park, four existing neighborhood parks, and private recreation facilities, totaling 21.5 acres.

Police

Police protection for the EastLake II project area is provided by the Chula Vista Police Department located at 276 Fourth Avenue in Chula Vista. Currently, they maintain a staff of 179 sworn police officers and 82.5 civilian/support personnel. For the fiscal year 1997/1998, they have a city-wide ratio of 1.17 sworn officers to 1,000 residents. There are two beat officers assigned to the EastLake II area; however, officers respond to calls citywide and the beat strength does not include traffic units, school resource officers, roving patrol agents, patrol sergeants, and investigative division units (Diosdado 1997).

The Chula Vista Police Department response times are guided by the GMOC Quality of Life Threshold Standards. These standards are used to determine whether there are adequate facilities for staff and equipment to provide police protection throughout the city of Chula Vista.

For emergency response, police units must respond to 84 percent of Priority One emergency calls within seven minutes and maintain an average response time of 4.5 minutes or less. Priority One calls include felony crimes in progress, life threatening situations, and injury to property. For Priority Two Urgent calls the police units must respond to 62 percent of the calls within seven minutes with an average response time to all Priority Two calls within seven minutes or less. Priority Two calls include misdemeanor crimes in progress, non-life threatening situations, possible injury to property, and emergency public services such as traffic signal failure. At present, the Chula Vista Police Department is unable to meet the thresholds standard for Priority One and Priority Two calls for the EastLake II area.

Response times for the approximate area of Otay Lakes Road, Olympic Parkway, EastLake Parkway, east to the Olympic Training Center are within reporting district numbers 125, 126, 135, and 136. For reporting districts 125 and 126, the average response times from January 1, 1997 to November 25, 1997 were 8.9 minutes for Priority One calls and approximately 11 minutes for Priority Two calls. For the same time period reporting district number 135 received only 13 calls for service, none of which were Priority One calls. Reporting district number 136 did not have any calls for service.

Fire

The project area is within the service boundaries of the Chula Vista Fire Department. The Fire Department follows the threshold standards for fire protection established by the City of Chula Vista. Fire stations are positioned throughout Chula Vista so as to satisfy the service levels established in the threshold standards. The threshold standards require properly equipped and staffed fire and medical units to respond to all residential and commercial properties within seven minutes for 85 percent of the cases.

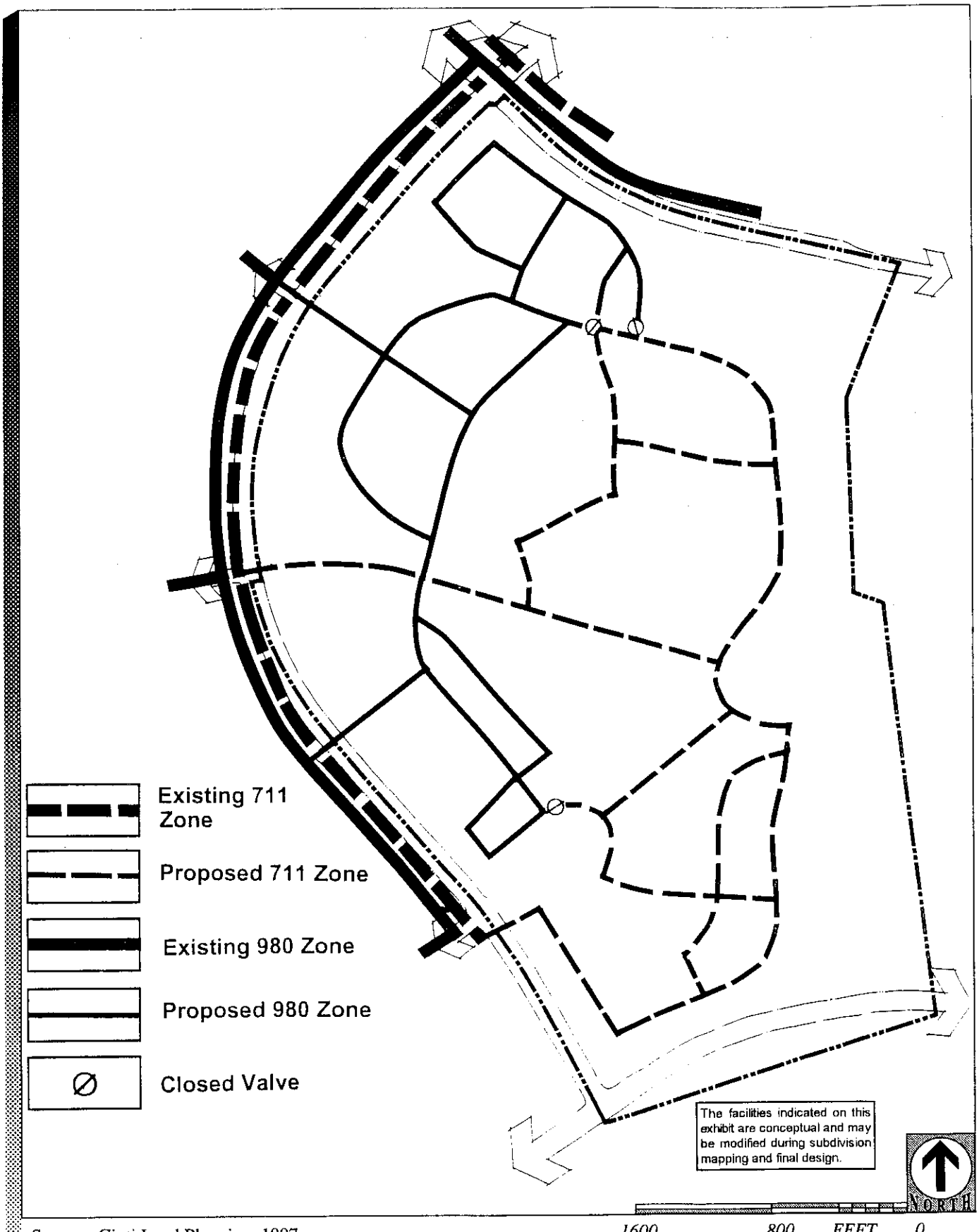
The two fire facilities which serve the EastLake area are Fire Station No. 4, located at 861 Otay Lakes Road, and Interim Fire Station No. 6 located at 975 Lane Avenue. The Chula Vista Fire Department is currently updating the Fire Station Master Plan. According to the draft plan, an additional three City fire stations within the Eastern Territories would be needed at buildout to accommodate cumulative growth. Currently, the City is served by six fire stations, including an interim Fire Station No. 6. Both fire stations currently serving the EastLake project area each have one fire engine equipped for fire, medical aid, and light rescue responses, and each station is staffed with three personnel. These two fire stations respond to 85 percent of all emergency calls for service within seven minutes as required under the Fire Threshold Standards (Beintema 1997).

4.9.2 Impacts

Water

Potable water would be delivered to EastLake Trails through existing transmission mains in Otay Lakes Road and Hunte Parkway. The proposed EastLake Trails distribution system would connect to the 24-inch 711 Zone transmission main in Hunte Parkway at Clubhouse Drive and at South Greensview Drive. Connections to the 16- and 30-inch 980 Zone transmission mains in Hunte Parkway would be made at North Greensview Drive and South Greensview Drive. Two connections are proposed to each transmission main to provide reliability and flexibility in the water supply. The proposed on-site and some off-site water system for the Trails is shown in Figure 4.9-2. An existing 12-inch water line crosses the EastLake Trails site to provide water supply to the Olympic Training Center. Grading operations within EastLake Trails would remove the existing 12-inch water line. Therefore, 711 Zone water transmission mains within Hunte Parkway and Olympic Parkway must be operational prior to removing the 12-inch water line to assure continued water service to the Olympic Training Center. This pipeline would be abandoned upon completion of the 711 Zone pipelines within Hunte Parkway and Olympic Parkway.

As part of the District's Capital Improvement Program (CIP) the 711 and 980 Zone transmission systems would be extended south of Otay Lakes Road in EastLake Parkway, Hunte Parkway, and the Future Olympic Parkway. These mains would ultimately furnish a completed loop water supply to EastLake Trails. In conjunction with buildout of the



Source: Cinti Land Planning 1997

FIGURE 4.9-2

EastLake Trails Domestic Water Plan

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development, EastLake Trails would extend the existing mains in Hunte Parkway south to Olympic Parkway and construct the mains in Olympic Parkway from EastLake Parkway east to the Olympic Training Center.

The "Land Swap" areas would be served by existing water transmission mains and extensions of existing water transmission mains. The northern "Land Swap" parcel would be served by existing 16-inch 711 Zone water transmission main located within Otay Lakes Road. The southern "Land Swap" parcel would connect to an extension of the existing 20-inch 980 transmission main in EastLake Parkway. The southern "Land Swap" would also be served by the future CIP water transmission mains in EastLake Parkway. The on-site water distribution systems would be developed after tentative development plans are approved.

Water demands for the Trails and "Land Swap" parcels were projected using unit water demand factors from the 1995 OWD Water Resources Master Plan. Unit water demands for residential dwellings were developed by dividing the total average annual day (AAD) demand computed on a gross acreage basis by the total number of dwelling units. The unit water demands for the proposed land uses is presented in Table 4.9-2. The projected water demands for the Trails and "Land Swap" parcels land uses are presented in Table 4.9-3. The projected AAD water demand for the Trails project is 0.43 mgd and the AAD water demand for the "Land Swap" parcels is estimated at 0.26 mgd.

The OWD requires operational storage within each zone to meet the following criteria: the operational capacity equal to 0.3 times the maximum day demand (MDD) for the zone, an emergency reserve capacity equal to the maximum day demand for the zone, and the maximum fire flow volume for the zone.

The maximum day (MDD) demands were calculated for the Trails and "Land Swap" parcels by multiplying the ADD demands by the peaking factors for the 711 and 980 and pressures zones. The 711 zone has a peaking factor of 1.9, and the 980 zone has a peaking factor of 1.8. The MDD for the Trails project is 0.78 mgd and the MDD for the "Land Swap" parcels is 0.47 mgd.

The fire flow criteria established by the Chula Vista Fire Department are specified in the Uniform Fire Code (UFC) Table A-III-A-1. For one- and two-family dwellings, 1,000 gpm for dwellings up to 3,600 square feet would be required. Buildings other than one- and two-family units would be required to meet the standards specified in the UFC.

The storage requirements for the Trails and "Land Swap" parcels is 2.10 mg and 1.30 mg respectively. The existing operational storage requirements for the 711 Zone is 6.8 mg and 5.58 mg for the 980 Zone. To meet the criteria established for operational storage, an additional 0.55 mg and 1.1 mg of operational storage will be required for the 711 and 980 Zones, respectively.

TABLE 4.9-2
UNIT WATER DEMANDS

Land Use	Area (acre)	Unit Demand[1] (gpd/acre)	Total Demand (gpd)	Dwelling Units	Unit Demand[2] (gpd)
SF Residential	194.5	1,785	347,280	817	425
MF Residential	27.2	2,232	60,708	272	223
School	14.5	1,250	18,125		
Park	49.0	-----	-----		

[1]Unit demands from the 1995 OWD Water Resources Master Plan.
[2]Unit demands are calculated by dividing the total demand by the number of dwelling units.

SF = single-family; MF = multi-family

TABLE 4.9-3
AVERAGE ANNUAL DAY POTABLE WATER DEMANDS

Land Use	Dwelling Units	Area (acres)	Unit Demand	AAD Demand[1] (gpd)
		EastLake Trails		
711 Zone				
SF Residential	309		425 gpd/DU	131,325
MF Residential	272		223 gpd/DU	60,656
Private Park2		5.0		
Public Park2		44.0		
711 Total				191,981
980 Zone				
SF Residential	508		425 gpd/DU	215,900
Elementary School		14.5	1,250	18,125
980 Total				234,025
Trails Total				426,000
		Land Swap Parcels		
711 Zone				
Commercial		24.7	1,250 gpd/acre	30,875
711 Total				30,875
980 Zone				
MF Residential	750		223 gpd/DU	167,250
Commercial		50.7	1,250 gpd/acre	63,375
980 Total				230,625
Land Swap Parcels Total				261,500

AAD = average annual day
gpd = gallons per day

The Otay Water District has implemented an Integrated Resources Plan for the development of local water supplies during normal and emergency conditions. The OWD's goals are to obtain 40 percent of its annual water demand from local water sources when water is not available through the CWA. Also, they want to obtain up to 70 percent of its annual water demand when water is available from the CWA to have a stored supply during periods when the CWA cannot supply the needed amount to the OWD. Additional benefits of the Integrated Resources Plan include the ability for the OWD to meet customer water demands during periods of drought, and to provide the lowest possible water rates to its customers (OWD 1995).

The OWD has a goal of being self-sufficient for 10 average annual demand days in the event of an aqueduct shutdown or emergency interruption of normal service from the CWA. Their goal is to meet a maximum of one-half of the 10 average annual days from storage, and the other one-half or more from alternative sources. Based on current water demands in the Central area, the OWD meets the five days of emergency storage. The OWD has emergency connections to the City of San Diego capable of delivering enough water in conjunction with existing storage, to meet a 10-day outage at current demand levels (OWD 1995).

The OWD has plans for additional terminal water storage facilities at a maximum of the five average day capacity to provide the capability to meet a 10-day outage on Pipeline No 4. Terminal storage is currently provided in the 624 Zone with a portion of Patzig reservoir and the 30 mg EastLake Greens reservoir. Planned future facilities for ultimate buildout include a 25 mg reservoir (624-4) for the 624 Zone, a 10 mg reservoir (711-3) and a 6 mg reservoir (711-4) for the 711 Zone, and a 6.0 mg reservoir (980-3), 2.0 mg reservoir (980-5), and an 8.0 mg reservoir (980-4) for the 980 Zone. Until buildout of the central area reservoirs, existing excess storage in the Otay Mesa system will be allocated to supplement the Central system (OWD 1995).

A water storage facility failure and/or flooding could potentially occur; however, since the facilities are designed with preventative measures, it is not considered a likely event. These measures include telemetry devices at the pump stations that shut off pumps when the water level in the reservoirs reaches a certain height, height sensors and valves in the reservoirs to stop the water flow, overflow structures to direct overflows into drainage structures, and the drainage structures are designed to direct overflows away from areas subject to damage.

Recycled Water

The proposed development of EastLake Trails and the "Land Swap" parcels includes the use of recycled water for irrigation of open space, public parks, school grounds, common areas for multi-family residential, and commercial landscaping. In order to obtain

recycled water service, those portions of the project that have not already been annexed are required to be annexed into Improvement Districts 22 and 27.

OWD, response #1

The proposed recycled water distribution plan for the Trails is shown in Figure 4.9-3. This system would connect to the existing 950 Zone mains in Hunte Parkway at South Greensview Drive and Clubhouse Drive. All on-site pipelines would be 6-inch in diameter in accordance with District design criteria. The recycled water pipelines would be installed concurrent with the phased construction of the potable water system. Dual piping would be used to accommodate recycled water transport to the project area as required by the OWD.

Figure 4.9-4 shows the proposed recycled water system for the "Land Swap" parcels. The northern "Land Swap" parcel would receive recycled water supply from a connection to the planned 950 Zone recycled water transmission mains to be located in Otay Lakes Road. The southern "Land Swap" parcel would receive recycled water supply from connections to the planned 950 Zone recycled water transmission mains to be located in EastLake Parkway and the future Olympic Parkway.

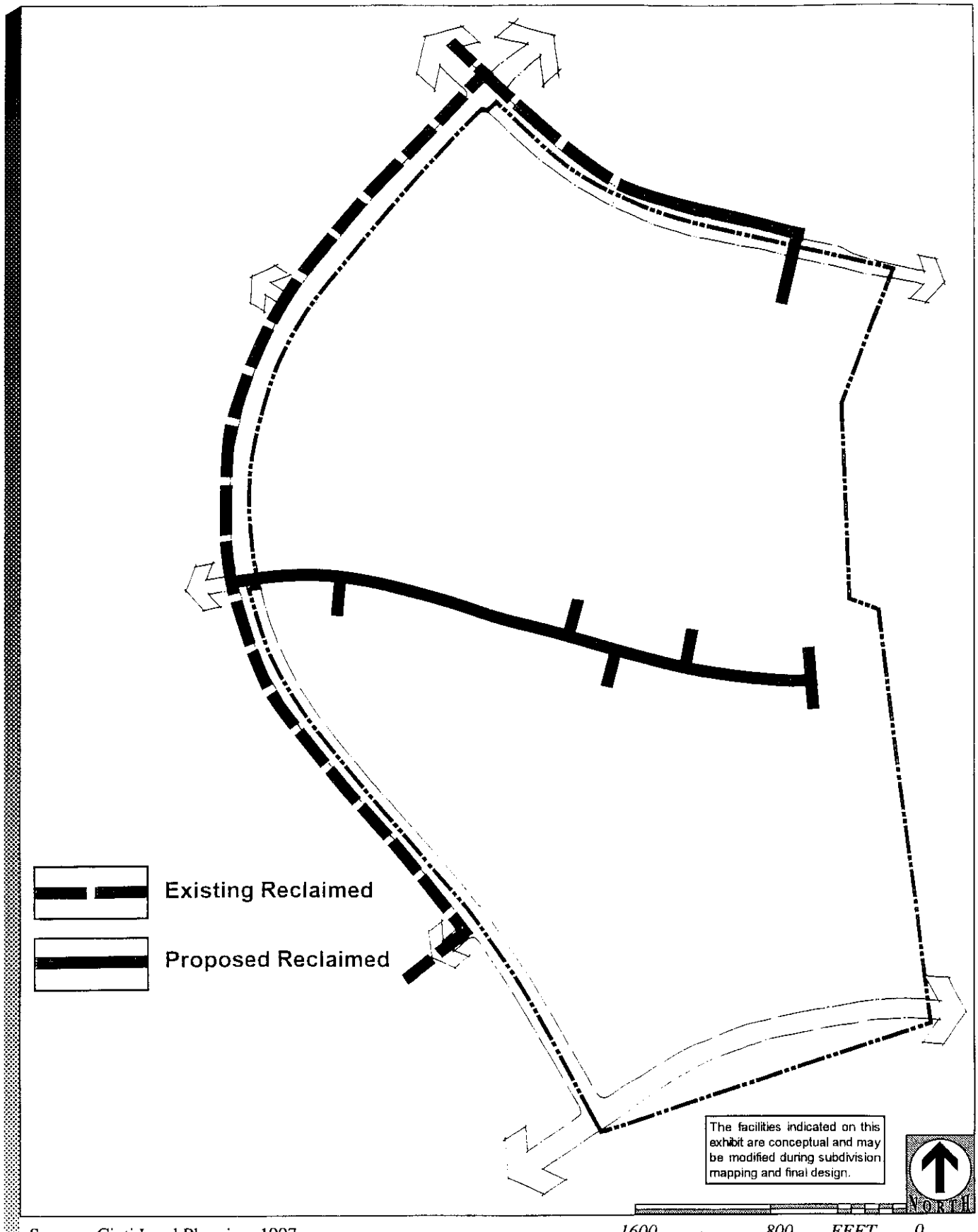
The projected average annual day recycled water demands are presented in Table 4.9-4. The total recycled water demand for the Trails is estimated at 66.3 gallons per minute (gpm), and 25.2 gpm for the "Land Swap" parcels.

Sewer Services

EastLake Trails

The City of Chula Vista Engineering Division has calculated sewage generation at 280 gallons/day/single-family dwelling unit, 210 gallons/day/multi-family dwelling unit, 2,500 gallons/day/acre for commercial and public/quasi-public use, and 12,000 gallons/day for one elementary school (City of Chula Vista 1997). Table 4.9-5 shows the estimated wastewater generation for EastLake Trails and the "Land Swap" parcels. Based on the current sewage generation rates for residential use, an average of 318,840 gallons per day (gpd) of sewage would be generated.

Sewer generation and facility requirements for the Trails project are addressed in the Draft Wastewater Master Plan for the Trails. The proposed on-site wastewater plan for EastLake Trails is shown in Figure 4.9-5. Specifically, with buildout of the Trails development, peak wastewater flow tributary to the Olympic Parkway Pump Station will approach approximately 65 percent of the station's existing capacity. Therefore, additional station expansion is not projected to be required. However, assuming that the Salt Creek Canyon Interceptor is not constructed prior to the addition of approximately 1,900 EDUs to the tributary collection system of the Otay Lakes Road Pump Station, this station will require expansion. Assuming no other development, buildout of the Trails



Source: Cinti Land Planning 1997

FIGURE 4.9-3

EastLake Trails Recycled Water Plan

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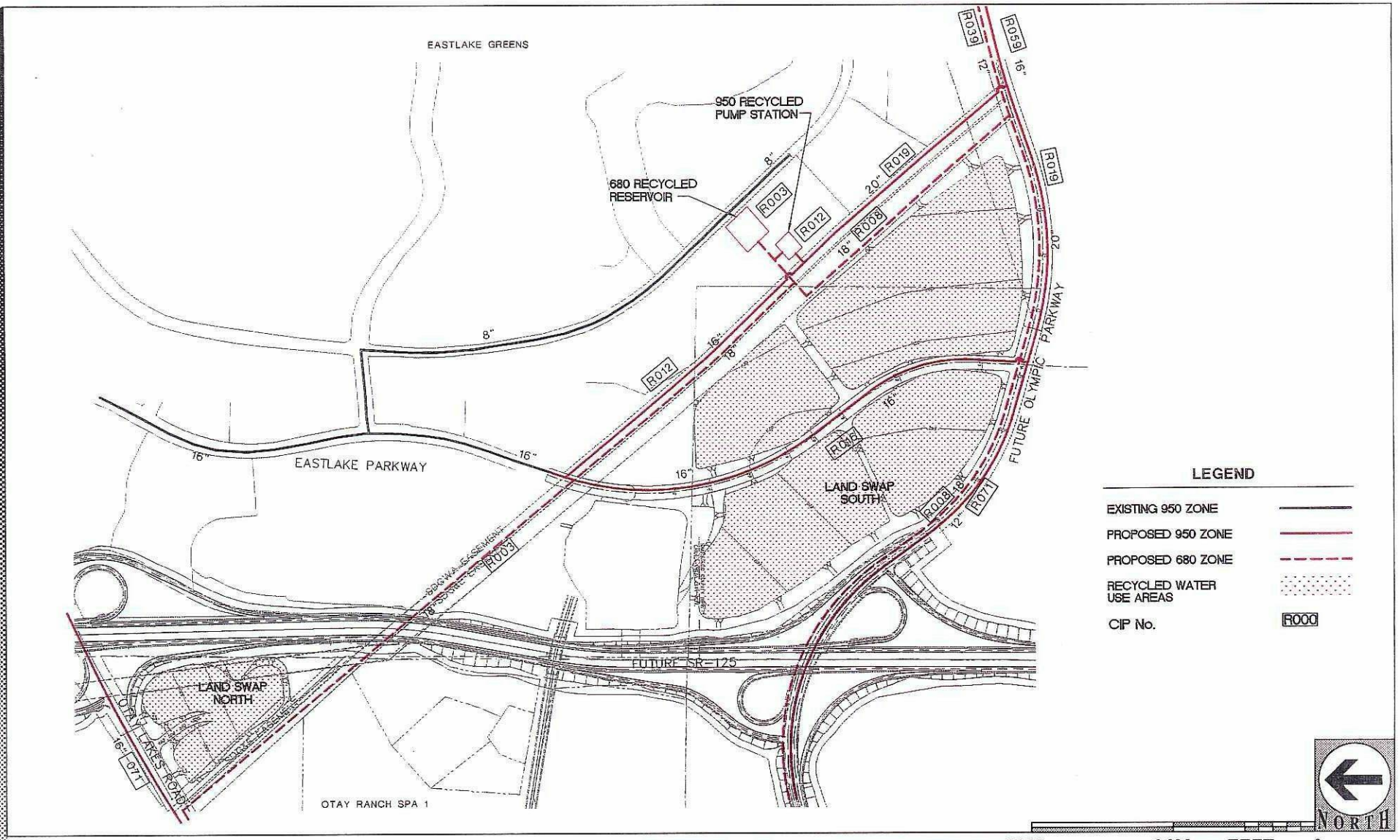

Source: John Powell & Assoc., Inc. 1998

FIGURE 4.9-4

Land Swap Parcels
Proposed Recycled Water System

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TABLE 4.9-4
PROJECTED RECYCLED WATER DEMANDS

Land Use	Area (acres)	Percent to be Irrigated	Irrigated Acreage	Unit Demand[1] (gpm/acre)	Average Demand (gpm)
			EastLake Trails		
School	14.5	20	2.90	1.549	4.49
MF Residential	27.2	15	4.08	1.549	6.32
Private Park	5.0	100	5.0	1.549	7.75
Public Park	44.0	70	30.80	1.549	47.71
Total	90.7		42.78		66.27
			Land Swap Parcels		
MF Residential	58.1	15	8.72	1.549	13.51
Commercial	75.4	10	7.54	1.549	11.68
Total	133.5		16.26		25.19

[1]Unit demand factors are taken from the OWD 1995 Water Resources Master Plan.
gpm = gallons per minute

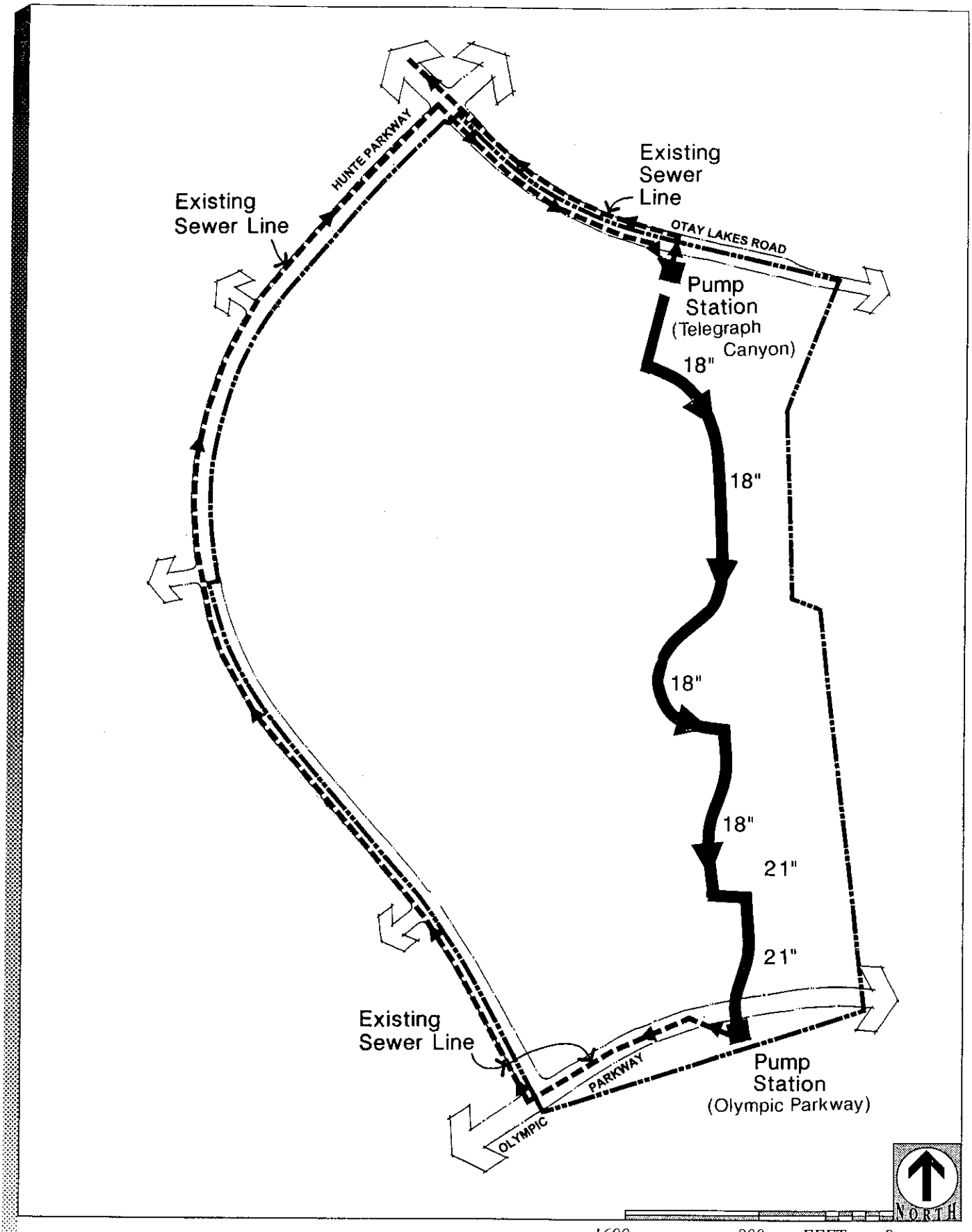
TABLE 4.9-5
ESTIMATED WASTEWATER GENERATION

Land Use	Amount	Unit Wastewater Generation*	Estimated Wastewater Generation (mgd)
Land Swap Parcels			
Residential			
Multi-family	705 units	210 gpd/unit	0.15
Non-Residential			
Commercial	50.7 acres	2,500 gpd/acre	0.13
Professional & Administrative	24.7 acres	2,500 gpd/acre	0.06
Total for Land Swap Parcels			0.34
EastLake Trails			
Residential			
Single-family	840	280 gpd/unit	0.24
Multi-family	280	210 gpd/unit	0.06
Non-Residential			
Schools	1 school	12,000 gpd/ school†	0.01
Private Park	5.0 acres	500 gpd/acre	0.003
Total for EastLake Trails			0.31

NOTE: gpd = gallons per day; mgd = million gallons per day

*Generation rates are average daily flow and are obtained from the City of Chula Vista Poggi Canyon Basin Gravity Sewer Basin Plan, 1997.

†This is based on 800 students per school and a rate of 15 gallons per student per day.



Source: Cinti Land Planning 1998

FIGURE 4.9-5
EastLake Trails Sewer System

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development will approach approximately 85 percent of the existing Otay Lakes Road station.

The phased construction of sewer facilities and/or participation in regional improvement programs, based on the approved master plan, would be incorporated into the Public Facilities Financing Plan and/or subdivision map conditions to assure timely provision of required facilities. The sewage generated by the EastLake Trails project would not cause the City to exceed its available capacity with the Metro Sewer system.

"Land Swap" Parcels

The ultimate average flows from the "Land Swap" parcels is estimated at 551,570 gallons per day. The sewage generated by the "Land Swap" parcels would not cause the City to exceed its available capacity with the Metro Sewer system. Development of the "Land Swap" parcels is not expected to occur until after construction is completed on the Poggi Canyon Trunk Sewer System. However, should these parcels develop prior to the completion of the trunk sewer, there would be a significant impact on the existing EastLake Parkway pump station. Once the Poggi Canyon Trunk Sewer is completed, wastewater generated by the "Land Swap" parcels would flow by gravity into the Poggi Canyon sewer system within Olympic Parkway.

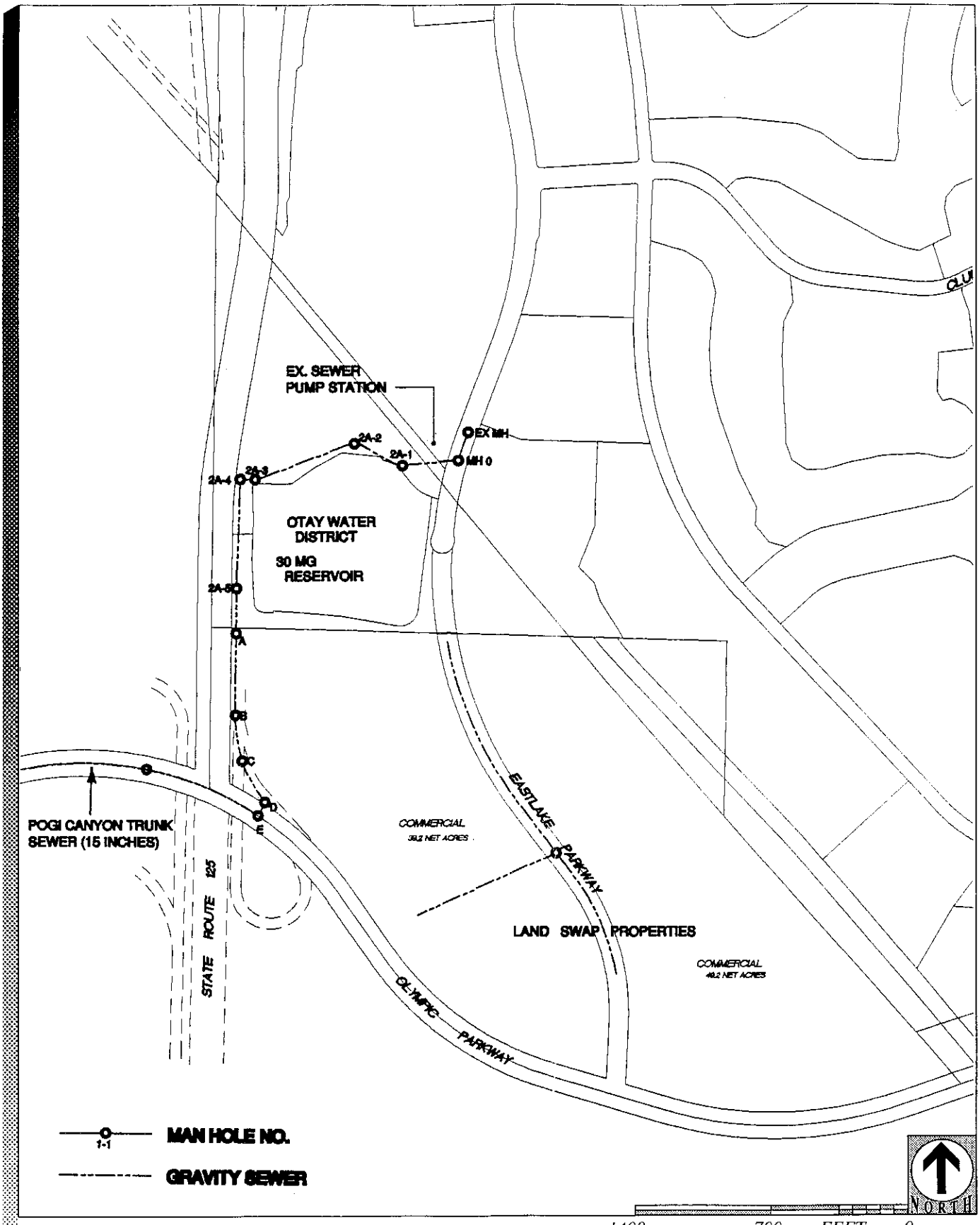
The wastewater study prepared for the "Land Swap" parcels (P&D Consultants, June 1998) recommends three gravity sewer alternatives for the "Land Swap" parcels to accommodate the projected flows. Because of the depth of the existing pump station manhole, portions of each alternative below would be approximately 40 feet deep. Because of the depth of the facility, this represents a potentially significant impact. Three alternatives are shown in Figures 4.9-6, 4.9-7, and 4.9-8 and include the following:

Alternative A–Install a 15-inch Sewer Main North of Otay Water District

Alternative B–Install a 15-inch Sewer Main South of Otay Water District

Alternative C–Install a 15-inch Sewer Main in the Existing SDG&E Easement

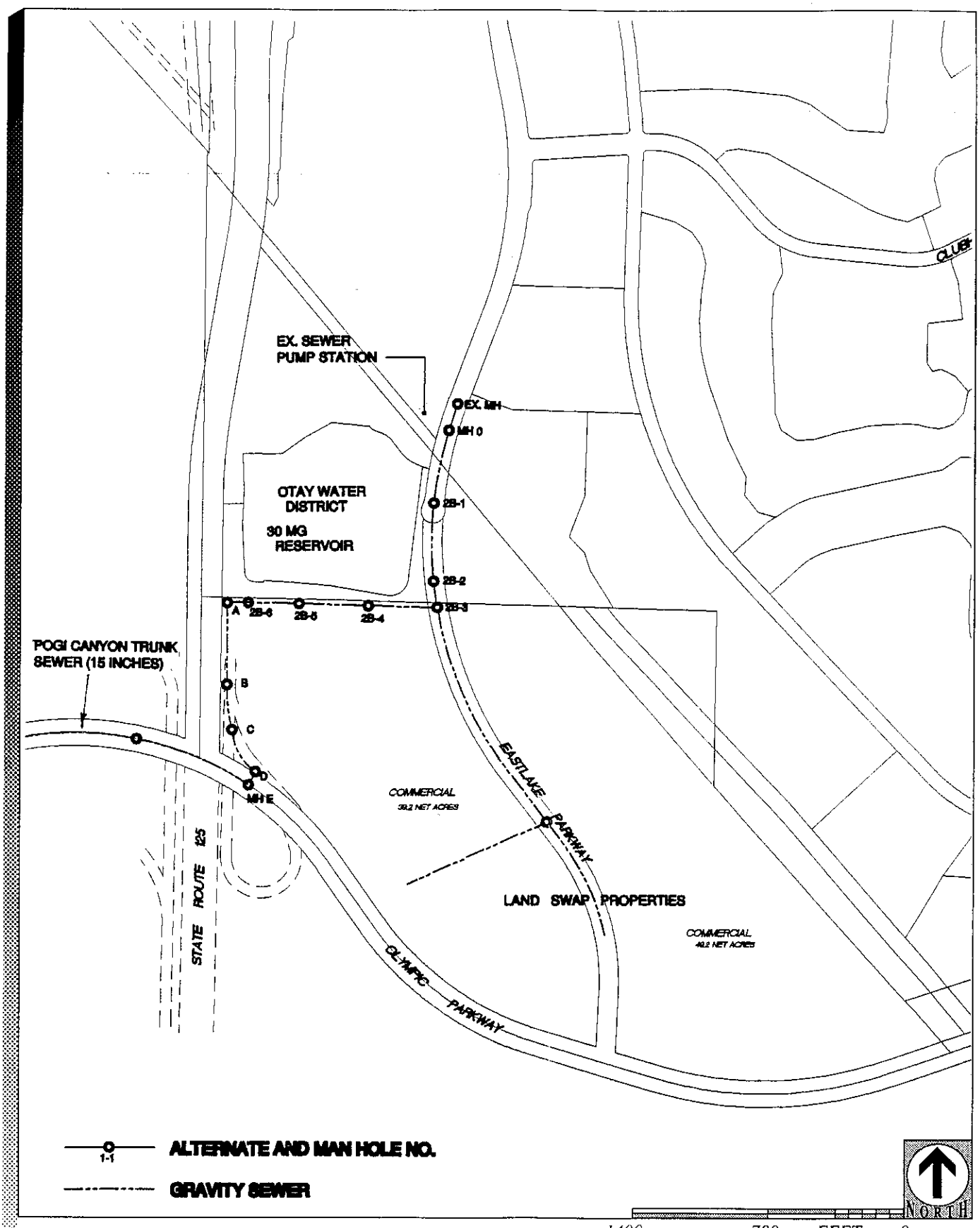
Although three alternatives are shown for the deep sewer, the City in conjunction with the developer will have to agree on a sewer alternative which does not have any sewer facilities deeper than 12 feet or one in which the amount of deep sewer is kept to a minimum through design of the "Land Swap" parcel or redesign of some of the existing sewer facilities in the area including but not limited to EastLake Parkway.



Source: Cinti Land Planning 1998

FIGURE 4.9-6

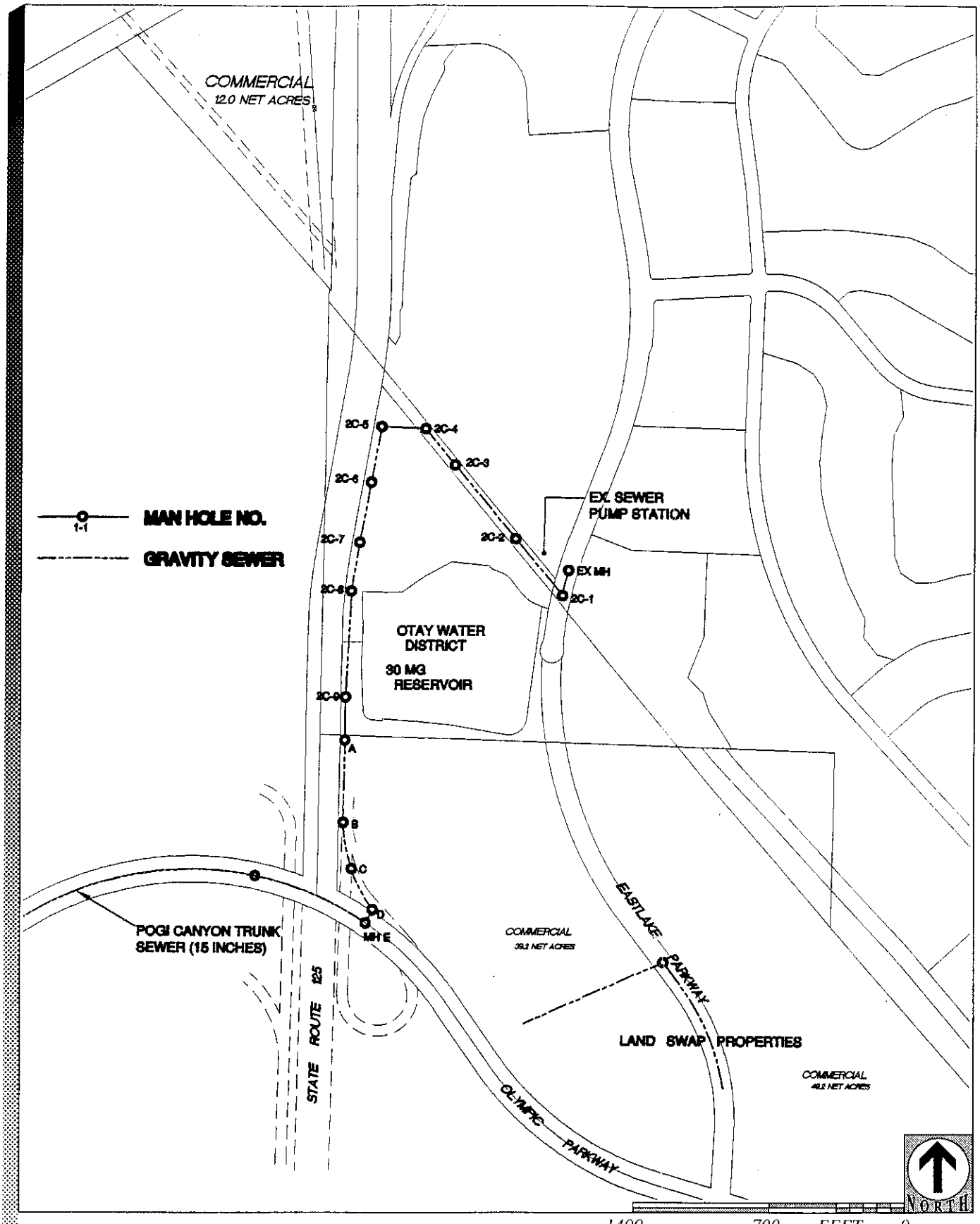
Southern Land Swap Parcel Sewer - Alternative A



Source:

FIGURE 4.9-7

Southern Land Swap Parcel Sewer - Alternative B



Source:

FIGURE 4.9-8

Southern Land Swap Parcel Sewer - Alternative C

Educational Facilities

The proposed residential development of EastLake Trails and the "Land Swap" parcels would have an impact on the current elementary educational facilities. Currently, EastLake High School and Rancho del Rey Middle School are not operating at capacity and would be able to house incoming students from the proposed development. Table 4.9-6 shows the two school district's generation rates, the number of students per household, along with the expected number of students generated by the proposed project.

The Chula Vista Elementary School District uses a generation rate of 0.30 students per household to calculate the number of students for grades K-6 that would be associated with new development (Peralta 1997). The school district uses the same generation rate for single- and multi-family dwelling units.

The Sweetwater Union High School District uses a student generation rate of 0.19 student per household for grades 9-12 and a generation rate of 0.10 for grades 7-8. The generation rates are the same for both single- and multi-family dwelling units (Wright 1997).

An increase of 705 residential units proposed in the revised EastLake Greens SPA would generate 211.5 K-6 grade students, 70.5 middle school students, and 134 high school students. The 1,120 residential units proposed in the EastLake Trails SPA would generate 336 K-6 students, 112 middle school students, and 212.8 high school students. The proposed project would yield an additional 547.5 K-6 grade students, 182.5 middle school students, and 346.8 high school students.

If the projected number of students generated from the proposed developments, "Land Swap" parcels (EastLake Greens) and EastLake Trails were sent to the current elementary schools, EastLake Elementary and Olympicview Elementary, then the development would have a significant impact on these existing schools since they are already over or near capacity.

The Sweetwater Union High School District and the Chula Vista Elementary School District have each formed Community Facilities (Mello-Roos) Districts for the purpose of financing school facilities within EastLake Trails through the use of special taxes and the issuance of bonds. The EastLake Trails Elementary School site would be reserved for acquisition by the school districts.

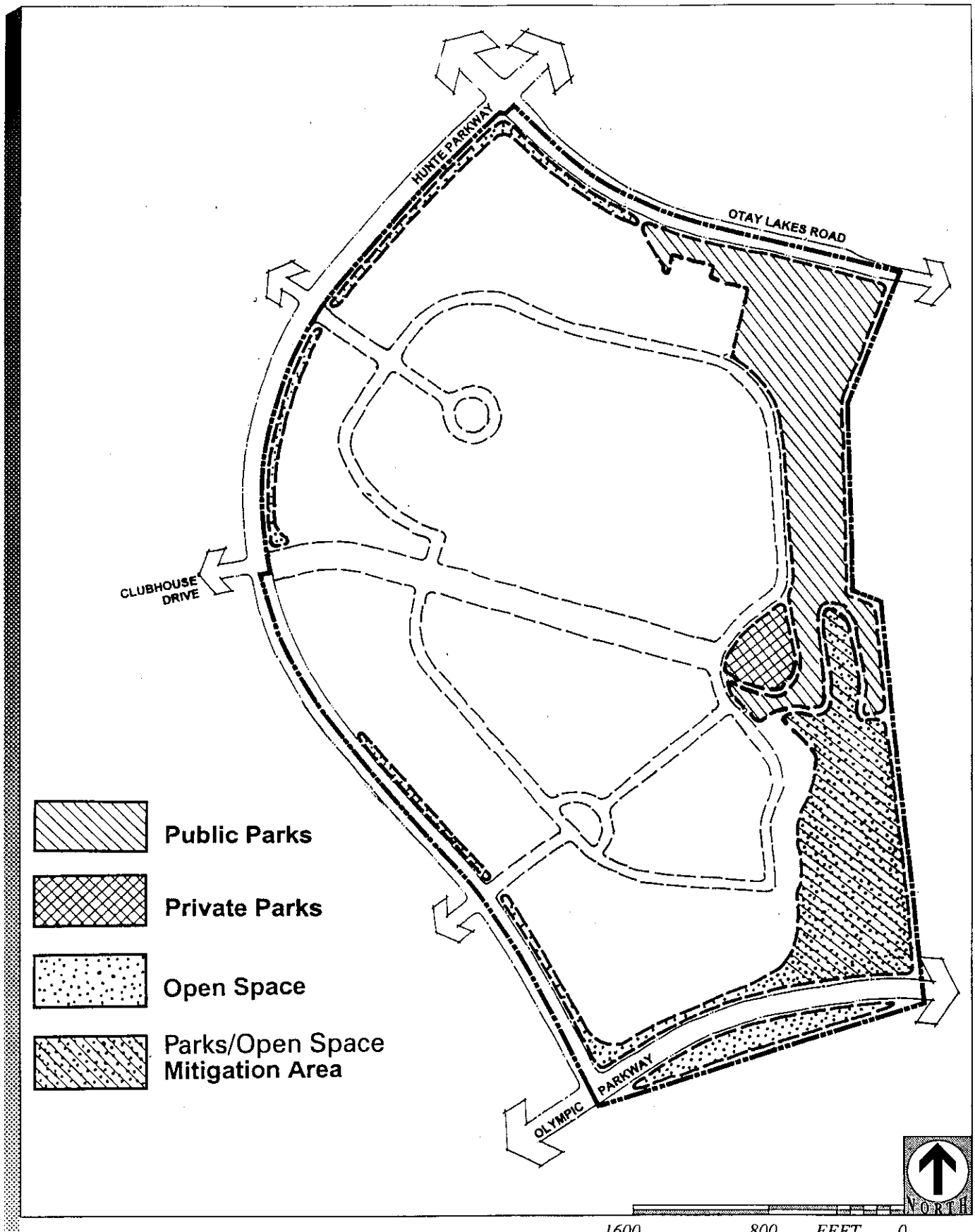
Parks and Recreation

The EastLake Trails SPA Plan proposes 48.4 acres for the Salt Creek Community Park and a 6.5-acre private neighborhood park as shown in Figure 4.9-9. The proposed public

TABLE 4.9-6
STUDENT GENERATION RATES

Grade	Student Generation Rate per Dwelling Unit	Number of Dwelling Units	Total Number of Students Generated
Chula Vista Elementary School District (CVESD)			
Land Swap parcels			
Elementary (K-6)	0.30	705	211.5
EastLake Trails			
Elementary (K-6)	0.30	1,120	336
Total for CVESD			547.5
Sweetwater Union High School District (SUHSD)			
Land Swap parcels			
Middle School (6-8)	0.10	705	70.5
High School (9-12)	0.19	705	133.95
EastLake Trails			
Middle School (6-8)	0.10	1,120	112
High School (9-12)	0.19	1,120	212.8
Total for SUHSD			529.25
GRAND TOTAL			1,076.75

SOURCE: Chula Vista Elementary School District 1997 and Sweetwater Union High School District 1997.



Source: Cinti Land Planning 1998

FIGURE 4.9-9

Parks and Open Space

RECON

park would extend the length of the Salt Creek corridor. The northern portion of the corridor would be improved with traditional active recreation facilities such as ball fields and sports courts. The southern portion would be dedicated to more passive activities consistent with the Salt Creek wetlands area. The park would be improved with trails, picnic tables, and other facilities which would contribute to the conservation and enjoyment of the natural amenities of the area. The amount of park acreage that will receive credit towards meeting the project's 3-acre-per-1,000-population requirements will need to be determined with adoption of the SPA Plan; however, the proposed plan will meet the threshold for local park acreage.

Police

Police protection is provided by the City of Chula Vista Police Department. The existing station is located at 276 Fourth Avenue. The police department currently exceeds the standard thresholds for Priority One and Priority Two calls in the EastLake II area. Development of the proposed project would result in an incremental increase in calls for police service and would result in a significant impact.

A related police/pubic safety issue concerns the potential use of the drainage culvert beneath Otay Lakes Road as a pedestrian/hiking trail leading to the Salt Creek linear park (Diosdado 1997). The proposed use of this drainage culvert for pedestrian/hiking trail leading to the park would create a high potential for criminal activity (Preuss, pers. com. 1998).

Fire

Fire protection would be provided to the project area by the Chula Vista Fire Department. The fire department follows the standard thresholds established by the City of Chula Vista for response times and provision of adequate water service for fire-fighting purposes.

The Chula Vista Fire Department is currently updating the Fire Station Master Plan. According to the draft plan, an additional three City fire stations within the Eastern Territories would be needed at buildout to accommodate cumulative growth. Currently, the City is served by six fire stations, including an interim Fire Station No. 6. The proposed plan recommends the construction of Fire Station No. 8 for the Salt Creek Ranch when EastLake Trails is fully developed. Station No. 8 would replace Station No. 4 and Station No. 6 as the primary response stations. At that time, Interim Fire Station No. 6 would be relocated to East "H" Street and San Miguel Road. It is currently located at 975 Lane Avenue across from the EastLake Greens development.

Acceptable response times can be provided to EastLake Trails and the "Land Swap" parcels from the Interim Fire Station No. 6 in the short-term. The relocation of Fire

Station No. 6 and the addition of Fire Station No. 8 for the Salt Creek Ranch is scheduled for the third phase of the proposed Fire Station Master Plan beginning in 2006. The relocation of Fire Station No. 6 and the addition of fire stations for Salt Creek Ranch and Otay Ranch would allow acceptable fire protection response times in the EastLake area.

4.9.3 Level of Significance Prior to Mitigation

The proposed project would result in an incremental increase in water consumption. The increase in water demand has been planned for by the OWD and as long as water facility construction coincides with the anticipated growth then no significant impacts would result with project development. However, an existing 12-inch water line crosses the EastLake Trails site to provide water supply to the Olympic Training Center. Grading operations within EastLake Trails would remove the existing 12-inch water line. This represents a potentially significant impact if the line is removed prior to the completion of the 711 Zone water transmission mains within Hunte Parkway and Olympic Parkway.

Development of the proposed project would result in an incremental increase in sewage generation and would present a significant impact due to the lack of existing transmission infrastructure ~~capacity~~. Specifically, the provision of sewer infrastructure on the southern "Land Swap" parcel may require the potential need for a trunk sewer deeper than typical city standards. The possible need for a deep facility ~~because of the depth of the sewer facilities at the "Land Swap" parcels, this~~ represents a potentially significant impact. In addition, development of the "Land Swap" parcels prior to the completion of the Poggi Canyon trunk sewer would be a significant impact on the existing EastLake Parkway sewer pump station. Also, if the Salt Creek interceptor sewer is not constructed prior to the addition of approximately 1,900 EDUs in EastLake, then the Otay Lakes Road pump station would need to be expanded to handle additional flows. The impacts would be reduced to below a level of significance by implementing the mitigation measures listed below.

The additional elementary school students generated by the proposed project would contribute to the existing schools that are near capacity and is considered a direct significant impact. This impact would be reduced to below a level of significance by implementing the mitigation measures identified below.

The proposed project would provide adequate public park and recreation facilities for EastLake and surrounding communities. No significant impacts are identified.

The Chula Vista Police Department currently does not meet the standard threshold for Priority One and Priority Two calls. The incremental increase in calls for police service is considered a significant impact. Likewise, should the underpass beneath Otay Lakes Road be used as a pedestrian trail leading to the Salt Creek linear park, the potential for significant public safety impacts exist.

The Chula Vista Fire Department currently meets the standard threshold for fire protection for the EastLake II area. The fire department would be able to provide adequate service to the area in the short-term; however, the incremental increase in calls for fire service may result in a significant impact at project buildout.

4.9.4 Mitigation Measures

4.9.4.1 Adequate potable and recycled water storage and distribution facilities will be constructed in accordance with ~~conjunction with the proposed project development. The water storage and distribution facilities improvements described in~~ the Subarea Master Plan for EastLake Trails and the "Land Swap" Areas (Powell and Associates, September~~May~~ 1998) and to the satisfaction of the OWD. ~~at the time tentative subdivision maps are processed for the EastLake Trails and "Land Swap" parcels.~~ These water infrastructure improvements are also described in the proposed Public Facilities Financing Plans for the EastLake Trails and EastLake Greens SPAs. The proposed PFFP identifies the development impact fees that the applicant needs to pay to mitigate impacts, the estimated cost of the facility, and the applicant's obligation to construct and/or pay for the necessary mitigation. Prior to approval of the first Final Map, the applicant shall provide written proof from OWD that adequate water storage and distribution facilities are available to serve the Trails and "Land Swap" parcels.

4.9.4.2 Water conservation techniques such as low-flow toilets and shower heads, drought-resistant landscaping, and recycled water for landscape irrigation will be required as conditions of approval for ~~future~~ the tentative maps to reduce on-site domestic water consumption.

4.9.4.3 711 Zone water transmission mains within Hunte Parkway and Olympic Parkway must be operational prior to removing the 12-inch water line to assure continued water service to the Olympic Training Center. This pipeline may~~would~~ be abandoned upon completion of the 711 Zone pipelines within Hunte Parkway and Olympic Parkway.

4.9.4.4 Mitigation for impacts to sewer service would require the development of additional facilities which would be funded by EastLake developers and the other developments as appropriate. These sewer mitigation measures are also described in the proposed PFFPs for the EastLake Trails and EastLake Greens SPAs. The proposed PFFPs describe public facilities fees, payment schedule by the developer, and timing of sewer improvements, based on the Telegraph Canyon Sewer Basin Improvement and Financing Plan Amendment (June 1993) and the City of Chula Vista Sewage Pump Station Financing Policy (No. 570-03). The sewer infrastructure and distribution facilities improve-

ments described in the Sewer Report for the "Land Swap" Parcels (P&D Consultants, Inc., June 1998), and The Trails Wastewater Master Plan (Dudek and Associates, August~~June~~ 1998) would be conditions of approval for ~~at the time~~ the tentative subdivision maps or other discretionary approvals ~~are processed~~ for the EastLake Trails and "Land Swap" parcels. These measures include:

a. Prior to the issuance of a building permit for the "Land Swap" parcels, completion of the Poggi Canyon Trunk Sewer System would be required.

b. Prior to the issuance of building permits beyond ~~addition of~~ 1,900 EDUs within the remaining EastLake planned community developable areas (EastLake II and III) ~~at the EastLake Trails project site~~, full expansion of the Otay Lakes Road pump station as described in the EastLake Trails Wastewater Master Plan (August 1998) shall be required if the Salt Creek interceptor sewer is not completed.

c. The project applicant shall propose and the City must approve a sewer alternative that does not have any sewer facilities deeper than 12 feet or one where the amount of deep sewer is minimized. Three alternatives are shown for the deep sewer associated with the "Land Swap" parcels. ~~Although three alternatives are shown for the deep sewer, the City in conjunction with the developer will have to agree on a sewer alternative which does not have any sewer facilities deeper than 12 feet or one in which the amount of deep sewer is kept to a minimum through design of the "Land Swap" parcel or redesign of some of the existing sewer facilities in the area including but not limited to EastLake Parkway.~~ Additional environmental review may be required depending on the sewer alternative that is selected.

4.9.4.5 The development of the proposed on-site elementary school (13 acres) would accomplish mitigation of the project's direct impact to schools. School facilities financing and mitigation agreements between the affected school districts and the project applicant would be required at the time the tentative map is approved by the City Council to ensure that the impacts on school facilities are mitigated to a level less than significant. These school mitigation measures are also described in the proposed Public Facilities Financing Plans for the EastLake Trails and EastLake Greens SPAs. The proposed PFFPs describe estimated costs for the the construction of school facilities identified in the SEIR. School facilities financing and mitigation agreements between the affected school districts and the project applicant shall be required prior to approval of any tentative map by the City Council. This mitigation includes the provision of 13 gross acres for a school site within the Trails for

acquisition by the school districts. ~~and~~ In addition, a financing agreement will be required that includes the formation of a Mello-Roos Community Facilities District ~~special tax assessment district~~ to ensure that development of school facilities is phased to accommodate the buildout of the project.

4.9.4.6 The project shall comply with the City of Chula Vista local parkland requirements as set forth by the City Parkland Dedication Ordinance.

4.9.4.7 Development of the proposed project would result in an incremental increase in calls for police service. ~~However, the development fees and other revenues to the City of Chula Vista would provide for additional patrol officers to the area.~~ Police mitigation measures are described in the proposed PFFPs for the EastLake Trails and EastLake Greens SPAs. The proposed PFFPs describe public facilities fees for police services based on equivalent dwelling units by development phase. Significant impacts to police services shall be addressed on a city-wide level through the payment of public facility fees. The EastLake Trails/Greens projects will be conditioned to pay public facilities fees at the rate in effect the time building permits are issued. Currently, the police department is addressing the threshold standard for deficiency by preparing long-range strategic plan and a police facility Master Plan. The strategic plan will evaluate service levels, staff levels, methods of development, and any other factors related to service delivery. This will also include an evaluation of the established threshold which may need to be adjusted. The public facility Master Plan will address the possibility of relocating the current police facility to a more central location.

4.9.4.8 Mitigation for the public safety impacts regarding the underpass beneath Otay Lakes Road is described below. Concurrent with the application of any TM, the applicant shall submit a plan that shows~~would require the following~~:

a. Landscaping on and around the hiking trails should be limited to low maintenance ground cover and trees and of a height that would not obscure visibility into the greenbelt/hiking trails route. This area should be kept as open as possible to discourage loitering.

b. Lighting with a minimum 15-foot height and of a construction that would resist tampering and damage would be required. Lighting should illuminate areas along the walkways and the surrounding recreational areas to increase the defensible space. In addition, the walkways with the surrounding lighting and landscaping would need to be of a type that would allow emergency vehicles to pass.

c. To promote use of the hiking trails and walkways, the subdivision design shall ~~should~~ encourage the construction of residential communities which overlook the greenbelt recreational areas and hiking trails.

d. The underpass will require continuous, well maintained, damage resistant lighting throughout the entire tunnel. The wall construction shall resist and discourage graffiti, and the materials used need to include an illumination factor to enhance the security lighting.

e. Because the drainage tunnel already has a required use (water runoff), construction of a raised pedestrian walking path would be required leading to and through the tunnel. To separate pedestrians from the drainage ditch and prevent pedestrian injury, a railing/fencing would be installed. The design and materials used to construct this fence/railing should discourage climbing.

f. With improvements expected to the street above the underpass, the application of natural lighting through the median would enhance the required installed (wired) lighting.

g. Park and facility closing times and use restrictions shall be posted and locked gates included. Set irrigation system timing to discourage use after hours and loitering. Installation of gates and fencing to control access to the suggested pedestrian underpass is highly recommended.

4.9.4.9 Significant impacts to fire services shall be addressed on a city-wide level through the payment of public facility fees. The EastLake Trails project will be conditioned to pay public facilities fees at the rate in effect at the time building permits are issued. These fire mitigation measures are also described in the proposed Public Facilities Financing Plans for the EastLake Trails and EastLake Greens SPAs. The proposed PFFPs describe public facilities fees for fire and emergency medical services based on equivalent dwelling units by development phase. The mitigation measures also include the adoption of the proposed, revised Fire Station Master Plan which calls for the addition of three new fire stations, including one within the Woods residential neighborhood of EastLake III within the eastern territories and the relocation of Interim Fire Station No. 6 within the Salt Creek Ranch project. The proposed changes to the Fire Station Master Plan would allow the fire department to meet the standard thresholds for fire protection at buildout of EastLake.

4.9.5 Level of Significance After Mitigation

Construction of additional water and sewage facilities would mitigate impacts to these facilities to a level of insignificance.

Implementation of the EastLake II GDP proposed parks and the above mitigation measure would mitigate potential impacts to parks and recreational facilities to a level of insignificance.

Additional police officers provided by development fees would reduce potential impacts to police protection.

Implementation of the proposed updated Fire Station Master Plan would reduce impacts to fire protection to below a level of significance.

4.10 Threshold Analysis

The City of Chula Vista adopted a Growth Management Ordinance (Chapter 19.09 of the Municipal Code) in an effort to preserve the City's quality of life and to ensure that public facilities and services are adequate to meet present and future needs of the City (City of Chula Vista 1991). This ordinance contains Quality of Life Threshold Standards that have been developed for 11 facilities and improvements. These thresholds set levels of service or maintenance required by each facility and are used to identify if new or upgraded facilities are necessary to mitigate for impacts of a new development. These thresholds must be addressed and met for each proposed project. The threshold standard for each of the 11 facilities addressed in the Growth Management Ordinance and associated impacts for the EastLake Trails and "Land Swap" projects are included in the following analysis.

4.10.1 Fire and Emergency Medical Service

The goal for fire and emergency medical service is "to maintain and improve the current level of fire protection and emergency medical service (EMS) in the City of Chula Vista." The threshold standard for emergency response is to maintain properly equipped and staffed fire and medical units and respond to 85 percent of the cases (measured annually) throughout the city within seven minutes. This standard has not been met over the last five years.

As discussed in Section 4.9, acceptable response times can be provided to EastLake Trails and the "Land Swap" parcels in the short term from Interim Fire Station No. 6. However, the relocation of Fire Station No. 6 and the addition of Fire Station No. 8 for the Salt Creek Ranch Project north of EastLake Trails site would be required to ensure acceptable response times in the long term. These facilities are scheduled within the Fire Station Master Plan beginning in 2006. With the provision of these facilities, the proposed project would meet the threshold for fire service per the City's Growth Management Ordinance.

4.10.2 Police

The goal for police protection is "to maintain or improve the current level of police service in the City of Chula Vista." The threshold standard for emergency response is to maintain properly equipped and staffed police units and respond to 84 percent of "Priority One" emergency calls within seven minutes and to maintain an average response time of 4.5 minutes or less to all "Priority One" emergency calls. In addition, the properly equipped and staffed police units shall respond to 62 percent of "Priority Two Urgent" calls within seven minutes and maintain an average response time of seven minutes or less to all Priority II calls. This standard has not been met over the last seven years. The Police Department has initiated efforts to address the response time deficiency (i.e.,

evaluation of staffing needs, service delivery areas, deployment methods, and false alarms from new residential development).

As the phased development of the EastLake Trails and "Land Swap" parcels proceeds, the proposed project would incrementally contribute to current threshold deficiency in responding to Priority One and Priority Two calls within the EastLake II project area. Development fees and increased tax revenues to the City from the proposed development would provide additional officers for the reporting districts 125, 126, 135, and 136. In addition, the public facility financing plans for developments in the eastern portion of the city include the potential for relocating the police station to a site that may better serve this area of the city.

4.10.3 Traffic

The goals for traffic are the following:

1. To provide and maintain a safe and efficient street system within the City of Chula Vista.

2. To establish a performance measurement methodology enabling the City to accurately determine existing levels of service for motorists.

3. To define a level of service value that represents a high quality of traffic flow under constrained operating conditions during peak periods of traffic activity.

4. To establish a performance standard which is consistent with the Regional Growth Management Standards.

5. To maintain consistency in terms of LOS ratings between the previous Intersection Capacity Utilization (ICU) methodology and the 1985 Highway Capacity Manual (HCM) methodology.

The applicable city-wide threshold standard is to maintain LOS 'C' or better as measured by observed average travel speed in all signalized arterial segments except that during peak hours an LOS "D" can occur for no more that any two hours of the day."

The results of the traffic technical analysis summarized in Section 4.2 indicate that unacceptable LOS would result under interim and buildout conditions with the proposed project. The impacted street segments by year are summarized below.

Year 2000 (without SR-125)

- No significant direct impacts.
- Cumulative significant segment impacts on East H Street (I-805 to Terra Nova Drive-LOS E) and Telegraph Canyon Road (I-805 to Paseo del Rey-LOS F).

Year 2005 (without SR-125)

- No significant direct impacts.
- Cumulative significant segment impacts on East H Street (I-805 to Terra Nova Drive-LOS E), Otay Lakes Road (East H Street to Telegraph Canyon Road-LOS E), and Olympic Parkway (I-805 to Paseo Ranchero-LOS F).

Year 2005 (with SR-125)

- No significant direct impacts.
- No significant cumulative impacts.

Year 2010 (with SR-125)

- No significant direct impacts.
- Cumulative significant segment impacts on Otay Lakes Road (SR-125 to EastLake Parkway-LOS E), EastLake Parkway (Otay Lakes Road to Clubhouse Drive-LOS E), and Lane Avenue (Proctor Valley Road to Otay Lakes Road-LOS F).

Buildout Conditions

- No significant direct impacts.
- Cumulative significant segment impacts on EastLake Parkway (north of Otay Lakes Road-LOS F) and EastLake Parkway (Otay Lakes Road to Clubhouse Drive-LOS E).

However, with implementation of the recommended mitigation measures the project would comply with the city-wide traffic threshold standard.

4.10.4 Parks and Recreation

The goal for parks and recreation is "to provide a diverse and flexible park system which meets both the active and passive recreational needs of the citizens of Chula Vista." The

threshold standard for population ratio is to provide three acres of neighborhood and community park land with appropriate facilities per 1,000 residents for areas east of I-805.

The proposed EastLake Trails SPA Plan provides for a Community Park within the Salt Creek corridor, which is identified as part of the planned Chula Vista Greenbelt open space and trail system identified in the City of Chula Vista General Plan. The SPA Plan proposes the inclusion of 48.4 acres of the Green belt as a Community Park and Open Space and a 6.5-acre private Neighborhood Park along the eastern boundary of the Trails project area. In addition, the southern portion of Salt Creek north of Olympic Parkway would be dedicated to more passive recreational uses consistent with the existing pond and wetlands in the corridor. These on-site parkland dedications that would be improved to city standards shall be outlined in the SPA Plan. While the proposed Community Park likely exceed the minimum park dedication requirements for the Trails project, the exact acreage that will be counted toward meeting the local park requirements will be subject to further analysis prior to adoption of the SPA Plan.

4.10.5 Water

The goal for water supply is "to ensure that adequate supplies of quality (appropriate for intended use) water are available to the City of Chula Vista." The threshold standards are as follows:

1. Developer will request and deliver to the City a service availability letter from the Water District for each project.

2. The City shall annually provide the San Diego County Water Authority, the Sweetwater Authority, and the Otay Municipal Water District with a 12- to 18-month development forecast and request an evaluation of their ability to accommodate the forecast and continuing growth. The Districts' replies should address the following:

   a) Water availability to the city and planning area, considering both short- and long-term perspectives.

   b) Amount of current capacity, including storage capacity, now used or committed.

   c) Ability of affected facilities to absorb forecast growth.

   d) Evaluation of funding and site availability for projected new facilities.

   e) Other relevant information the District(s) desire(s) to communicate to the City and GMOC.

In addition, the threshold standard states that "the growth forecast and water district response letters shall be provided to the GMOC for inclusion in its review."

As stated in Section 4.9, adequate water distribution facilities would be required in conjunction with approval of the SPA Plan. The projected increase in water consumption of 261,500 gallons per day from the Otay Water District would represent an increase in regional water consumption. The on- and off-site water infrastructure improvements required by the Subarea Master Plan for EastLake Trails and "Land Swap" parcels would accommodate the water demand from the proposed SPA amendment.

In addition, the SPA Plan includes a reclaimed water distribution system which would be consistent with the requirements of the Otay Water District. The Subarea Master Plan for EastLake Trails and "Land Swap" parcels also include the infrastructure requirements for the reclaimed water system.

4.10.6 Drainage

The goal for drainage systems is "to provide a safe and efficient storm water drainage system to protect residents and property in the City of Chula Vista." The threshold standard states:

1. Storm water flows and volumes shall not exceed City Engineering Standards.

2. The GMOC shall annually review the performance of the City's storm drain system to determine its ability to meet the goals and objectives above.

As described in detail in Section 4.4 of the SEIR, the proposed drainage improvements have been sized to handle the estimated post-developed peak flows. The City of Chula Vista requires that increased runoff from urbanization be detained to levels at or below natural conditions for the 10-, 50-, and 100-year frequency storms. The results of the drainage studies prepared for both the EastLake Trails and "Land Swap" parcels show that the existing detention basin is adequately designed to detain the 10-, 50-, and 100-year storm peak discharges below the existing conditions peak discharges The proposed development with the mitigation requirements outlined in the SEIR would not result in any significant changes to the drainage patterns and storm water discharge volumes, and would meet the established City threshold.

4.10.7 Sewer

The goal for sewer systems is "to provide a healthful and sanitary sewer collection and disposal system for the residents of Chula Vista." The threshold standard states the following:

1. Sewage flows and volumes shall not exceed City Engineering Standards.

2. The City shall annually provide the San Diego Metropolitan Sewer Authority with a 12- to 18-month development forecast and request confirmation that the projection is within the City's purchased capacity rights and an evaluation of their ability to accommodate the forecast and continuing growth, or the City Engineering Department staff shall gather the necessary data. The information provided to the Growth Management Oversight Commission shall include the following:

   a. Amount of current capacity now used or committed.

   b. Ability of affected facilities to absorb forecast growth.

   c. Evaluation of funding and site availability for projected new facilities.

   d. Other relevant information.

As described in Section 4.9, the City of Chula Vista holds capacity rights of 19.3 mgd in the San Diego Metropolitan Sewerage System (Metro). The City's current average wastewater flow into the Metro system is 11.6 mgd (Davies 1998). Chula Vista has approximately 7.7 mgd remaining available capacity in the Metro Sewer.

Sewer generation and facility requirements for the Trails project were addressed in the Draft Wastewater Master Plan for the Trails. Based on the current sewage generation rates for residential use, an average of 318,840 gpd of sewage would be generated.

The ultimate average flows from the "Land Swap" parcels is estimated at 551,570 gpd. Development of the "Land Swap" parcels should not occur until after construction is completed on the Poggi Canyon Trunk Sewer System; therefore, impacts to the existing EastLake Parkway pump station would not occur. Once the Poggi Canyon Trunk Sewer is completed, wastewater generated by the "Land Swap" parcels would flow by gravity into the Poggi Canyon sewer system within Olympic Parkway.

The phased construction of sewer facilities and/or participation in regional improvement programs, based on the approved master plan, would be incorporated into the Public Facilities Financing Plan and/or subdivision map conditions to assure timely provision of required facilities. Compliance with the phased sewer infrastructure improvements would ensure that the threshold standard for sewage capacity would be met.

4.10.8 Air Quality

The goal for air quality is "to maintain and improve the ambient air quality enjoyed by the citizens of Chula Vista." The standard threshold states that "the City shall annually

provide the San Diego Air Pollution Control District (APCD) with a 12- to 18-month development forecast and request an evaluation of its impact on current and future air quality management programs, along with recent air quality data. The growth forecast and APCD response letters shall be provided to the GMOC for inclusion in its annual review."

The regional air quality management strategy (RAQS) is based on growth projections derived from community and general plan land use designations. EastLake Trails and the "Land Swap" parcels are in the city of Chula Vista, which is within the San Diego Air Basin. The 1991/1992 RAQS, as revised by the required 1994 triennial update, are being implemented by APCD throughout the air basin. If a project is consistent with the City's General Plan, it can be considered consistent with the growth assumptions in the RAQS (State of California 1989). The proposed project is consistent with Chula Vista's General Plan. Therefore, the proposed project is considered consistent with the growth assumptions in the RAQS.

The proposed project is not growth inducing and has been designed to accommodate transit planning principals and bicycle and pedestrian routes as part of the SPA Plan. Therefore, the proposed project is consistent with the goals and objectives of the RAQS, and would satisfy the threshold standard for air quality.

4.10.9 Economics

The goal for economics is "to provide land uses and activities which respond to the economic needs of the residents and the City of Chula Vista." The threshold standard is as follows:

1. The GMOC shall be provided with an annual fiscal impact report which provides an evaluation of the impacts of growth on the city, both in terms of operation and capital improvements. This report should evaluate actual growth over the previous 12-month period, as well as projected growth over the next 12- to 18-month period, and 3- to 5-year period.

2. The GMOC shall be provided with an annual 'economic monitoring report,' which provides an analysis of economic development activity and indicators over the next precious 12-month period, as well as projected growth over the next 12-18 month period, and 3-5 year period.

Based on fiscal analyses prepared by CIC Research (1998) for EastLake Trails (Appendix K) and the "Land Swap" parcels (Appendix L), both of the project components are expected to have a positive net annual fiscal impact on the City. Anticipated revenues from EastLake Trails range from $41,500 in the first year of development to $902,300 at full buildout of the project, with the net annual fiscal impact

being positive from year 1 ($1,100) to buildout ($14,500). For the "Land Swap" parcels, the anticipated revenues range from $376,000 in the first year of development to $986,700 at full buildout of the "Land Swap" parcels, with the net annual fiscal impact being positive from year 1 ($13,300) to buildout ($94,300).

4.10.10 Schools

The City's goal with respect to schools is "to ensure that the Chula Vista City School District and Sweetwater Union High School District have the necessary school sites and funds to meet the needs of the students in new development areas in a timely manner." The threshold standard for schools is as follows:

The City shall annually provide the two local school districts with a 12- to 18-month development forecast and request an evaluation of their ability to accommodate the forecast and continuing growth. The Districts' replies should address the following:

1. Amount of current capacity now used or committed.

2. Ability to absorb forecasted growth in affected facilities.

3. Evaluation of funding and site availability for projected new facilities.

4. Other relevant information the District(s) desire(s) to communicate to the City and GMOC.

In addition, the threshold standard states that "the growth forecast and school district response letters shall be provided to the GMOC for inclusion in its review."

The proposed residential development of EastLake Trails and the "Land Swap" parcels would have an impact on the current elementary educational facilities. Impacts to the middle school and high school would not be significant. The additional elementary school students generated by the proposed project would contribute to the existing schools that are near capacity and is considered a direct significant impact.

The Sweetwater Union High School District and the Chula Vista Elementary School District have each formed Community Facilities (Mello-Roos) Districts for the purpose of financing school facilities within EastLake Trails through the use of special taxes and the issuance of bonds. The EastLake Trails Elementary School site would be reserved for acquisition by the school districts. Mitigation for school impacts includes the provision of 13 acres for a school site within the Trails for acquisition by the school districts and a financing agreement that includes a Mello-Roos special tax assessment district. This fulfills the intent of the thresholds standards policy for schools.

4.10.11 Libraries

The goal for the libraries is to "provide a high quality, contemporary library system which meets the varied needs of the community." The threshold standard for the population ratio for library facilities is to provide 500 square feet (gross) of adequately equipped and staffed libraries per 1,000 population.

The City of Chula Vista operates three library facilities: the Civic Center/Main Library, the South Chula Vista Branch, and the EastLake Branch. The EastLake Branch is a joint use facility with EastLake High School. The EastLake Branch was established in 1993 as an interim facility to provide library service in the eastern territories. Overall, the Chula Vista Library exceeds the Threshold Standard of 500 square feet/1,000 population. In Fiscal Year 1997/1998 the City had 649 square feet of library facility/1,000 population.

However, geographically the eastern territories do not have an adequate facility. Growth in the eastern territories has prompted the preparation of a Library Service Master Plan, targeted for completion in August 1998, which will address this geographic inequity and provide a Master Plan for Chula Vista libraries.

The Rancho del Rey SPA, west of EastLake, has a site reserved for a library at East H Street and Paseo Ranchero, and the EastLake Village Center North Master Tentative Map will include a one-acre library site. Public Facilities Development Impact Fees (PFDIF) are being collected for the construction of new library facilities.

5.0 OTHER REQUIRED CEQA SECTIONS

5.1 Cumulative Impacts

Section 15130 (a) of CEQA Guidelines requires that "cumulative impacts shall be discussed when they are significant." Cumulative impacts involve individual effects which may increase in scope or intensity when considered together. Such impacts typically involve a number of local projects, and can result from individually incremental effects which collectively increase in magnitude over time. The CEQA Guidelines require that an evaluation of cumulative impacts include either (1) a list of past, present, and reasonably anticipated future projects producing related or cumulative impacts or (2) a summary of projections contained in an adopted general plan or related planning document that is designed to evaluate regional or areawide conditions. The cumulative analysis is required to include a summary of expected environmental effects and a reasonable analysis of the cumulative impacts of the relevant projects, references for additional information on individual projects, and reasonable options for avoiding or mitigating any significant cumulative effects of a proposed project.

For the purposes of this cumulative analysis, significant impacts identified for the proposed EastLake II Planning Program project are considered with potential impacts from specific past, present, or reasonably foreseeable projects. These include the other planned and/or existing projects in the surrounding area: EastLake Greens, EastLake Hills and Shores, EastLake Business Center I, Salt Creek I, EastLake Business Center II, EastLake Vistas and Woods, the Olympic Training Center, Salt Creek Ranch, and Otay Ranch SPA I. Figure 5-1 shows the location of these projects relative to the proposed project site.

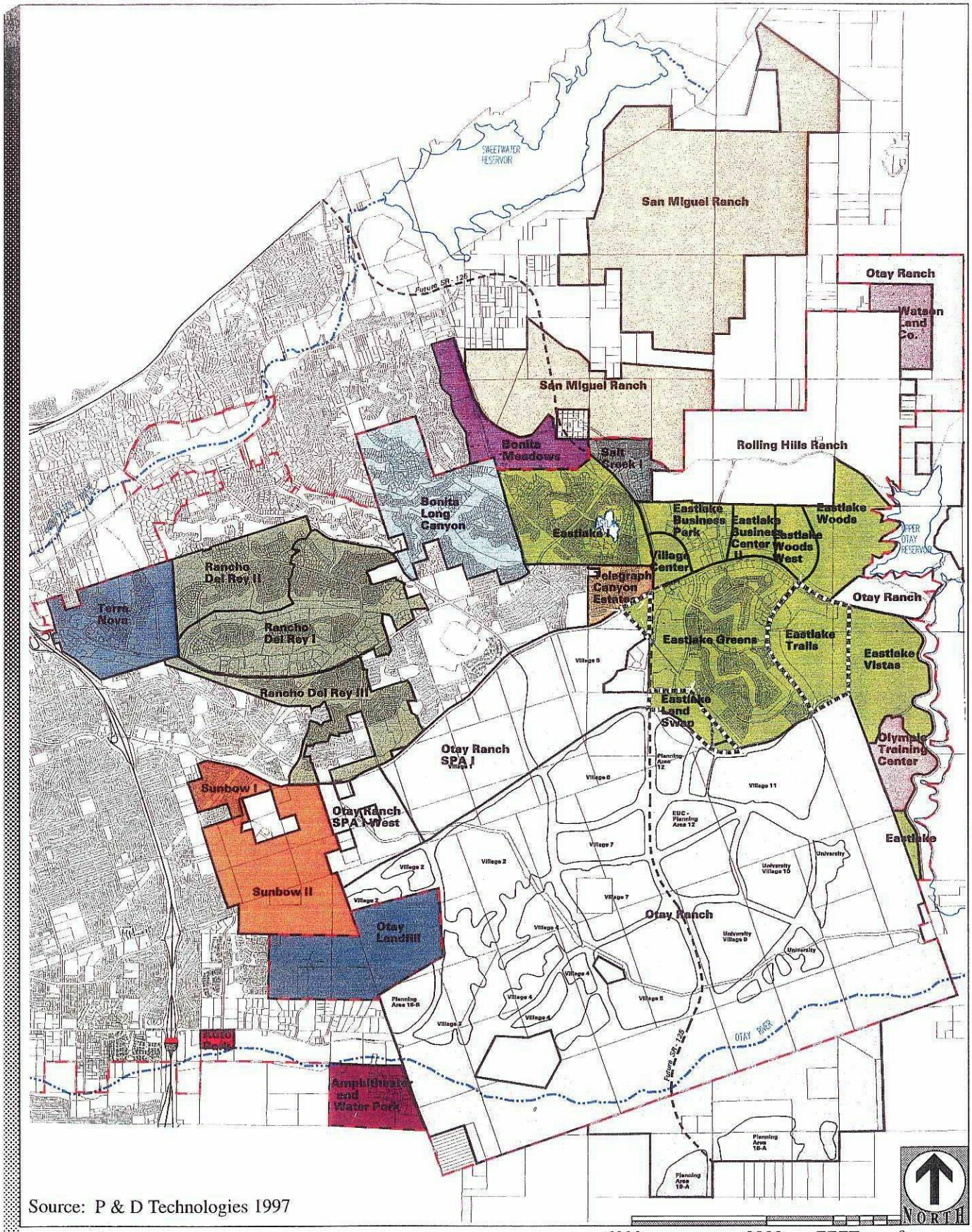
The following analysis includes assessment of cumulative effects associated with implementation of the above projects or plans. The major issues are discussed below.

Landform/Visual Quality

The combined projects have altered and would continue to alter the existing landforms and visual setting in the area from that of open expanses of rolling hills used for agricultural purposes, to that of clustered residential areas separated by open space. The change in landform and the visual setting would be a cumulatively significant impact.

Transportation/Traffic Circulation

The proposed project would contribute to significant cumulative traffic circulation impacts at project area intersections, street segments, and freeway operations for the year 2000, year 2005 (without SR-125), year 2010 (with SR-125), and at buildout. The



Source: P & D Technologies 1997

Eastlake Trails project boundaries

City of Chula Vista boundaries

FIGURE 5-1

Major Projects in the Vicinity of Eastlake Trails

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specific cumulative impact and associated mitigation measures are described in detail in the traffic technical report and in Chapter 4.2, Traffic Circulation, of the draft SEIR.

Noise

Existing noise levels on the project site are due primarily to off-site activities on the surrounding adjacent lands. Ambient noise levels in the project area would increase in association with the proposed project traffic volumes in addition to other noise sources associated with urban activities. Noise levels would not exceed land use compatibility standards if mitigation measures are incorporated.

Water Services

The proposed project would incrementally increase regional water consumption; however, this increase represents an insignificant impact on current water availability. The use of reclaimed water for irrigation purposes and the proposed conservation measures for reducing potable water consumption would reduce water consumption and avoid contribution to a significant cumulative impact.

Sewer Services

Development of EastLake Trails and the "Land Swap" parcels would incrementally reduce the capacity at the Point Loma Metro Sewer System. However, due to the large area served by the Metro system and the comparatively small increase generated by EastLake Trails and the "Land Swap" parcels, the project would not represent a significant impact to regional sewer services. The proposed project combined with similar projects in the surrounding area could have a cumulatively significant impact upon the City of Chula Vista's sewer infrastructure if not mitigated through improvements and the construction of additional facilities. However, construction of additional sewage facilities, based on City requirements, would mitigate for project-specific impacts and the project's contribution to cumulative impacts to a level of insignificance.

Hydrology/Drainage

Development of the above projects would potentially increase the amount of erosion, due to increased amounts of runoff from impervious surfaces. Erosion can be destructive to the immediate area and siltation can clog waterways and downstream areas. Measures can be incorporated into the project to decrease erosion. Increased erosion can also result in a decrease of downstream water quality. The quality of runoff water from the project areas is affected by contaminants, such as pesticides, fertilizers, and petroleum products. Implementation of Best Management Practices, as discussed in Chapter 4.4, would lessen this impact.

As a condition of project development, engineering and design features would be required to ensure that the volume and rate of runoff does not exceed existing, predevelopment levels. With these features, the project would not contribute to a cumulative impact to off-site drainage. The project would require maintenance of drainage facilities on-site.

Air Quality

The San Diego area is a nonattainment basin for ozone resulting from emissions of reactive organic gases from autos. Any increase in emissions from automobiles is a cumulatively significant impact. The San Diego Air Pollution Control District is responsible for strategies to reduce air pollution in the air basin and bases its projections of future air quality and pollutant emissions on population and employment growth estimates developed by SANDAG. New housing typically does not have a significant adverse effect on strategies to improve air quality if the project is consistent with the assumptions used in the APCD projection model and does not increase dependency on automobile trips relative to other locations.

The proposed project would generate air pollutants in the San Diego area. The incremental increase in air pollutants generated from the project combined with air quality impacts from surrounding projects may have a cumulatively significant impact to the air quality in the San Diego area.

Cultural/Paleontological Resources

The EastLake area contains significant paleontological sites in the underlying Otay and Sweetwater Formations. The recovered EastLake fossils represent a significant contribution to California paleontology. Also, several cultural sites were identified during the cultural resource investigations of the EastLake property, and mitigation sufficient to render impacts insignificant were designed and are included under the mitigation measures for cultural resources. No significant cultural resource sites were located on the EastLake Trails site or "Land Swap" parcels site. Thus, no significant adverse impacts to archaeological or paleontological resources would occur as a result of project implementation.

Biological Resources

Given the predominance of agricultural land and lack of sensitive vegetation on the EastLake Trails and "Land Swap" parcels project sites, the project's contribution to cumulative biological impacts would not be significant. The cumulative loss of sensitive habitats within the City is addressed in the Multiple Species Conservation Program (MSCP) and the draft City of Chula Vista Subarea Plan and sensitive habitats would be preserved in large, contiguous areas of habitat in perpetuity. These areas would also be

managed for long-term persistence through implementation of the MSCP. As noted in the Chapter 4.3 (Biological Resources) of this SEIR, the EastLake Trails property and the "Land Swap" parcels are located outside the Multi-Habitat Planning Area (MHPA) boundaries.

5.2 Growth Inducement

A project is defined as growth inducing when it directly or indirectly fosters economic growth, population growth, or the construction of additional housing in the surrounding environment; when it removes obstacles to population growth; when it taxes public facilities and services; and/or when it encourages or facilitates other activities that could significantly affect the environment, either individually or cumulatively. Growth inducement is generally dependent on the presence or lack of existing utilities and municipal or public services. The provision of such necessities in an unserviced area can induce growth between newly serviced areas and the community from which the facilities are obtained. In addition, growth inducement can also be defined as growth that makes it more feasible to increase the density of development in surrounding areas.

The City of Chula Vista's growth management plan calls for directing growth in and around the City in an orderly fashion, to avoid leapfrog development, to protect and preserve the City's amenities, and to guide growth in a general west to east direction. The City of Chula Vista anticipates the development of the EastLake Trails property and the "Land Swap" parcels as part of the EastLake planned community.

The proposed development plans for the EastLake II project call for an additional 705 residential units for EastLake Greens which includes the "Land Swap" parcels, and 1120 residential units, a school site, a community park, open space, public/quasi-public uses, and associated public infrastructure (e.g., water and sewer) for EastLake Trails.

Implementation of the proposed EastLake II project may have some growth inducing impacts on undeveloped land to the north, east, and south of the project area by providing public infrastructure improvements (e.g., water and sewer lines) adjacent to currently undeveloped, non-serviced areas. In addition, new roads and improvements to existing roadways would provide and improve access to many on- and off-site areas. Olympic Parkway would be extended through land designated future urban to the east of the project area. The extension of Hunte Parkway south of the project site into land designated for agricultural use, however, could potentially encourage growth of a development that could connect to Hunte Parkway. Approval of the project may encourage the development of adjacent areas to the north, east, and south to occur sooner than would otherwise take place without the project.

The project site and surrounding areas are zoned for future urban growth, and the City's growth management plan was designed with the intent of directing area growth in an

orderly fashion in a west to east direction. The City of Chula Vista anticipates the development of the EastLake Trails and "Land Swap" parcels as an urban community in an area the City of Chula Vista designates for future urban growth. Therefore, the proposed EastLake II project does not present a significant growth-inducing impact.

5.3 Significant Irreversible Environmental Changes Which Would be Involved in the Proposed Action Should it be Implemented

The most prominent irreversible environmental change associated with the proposed EastLake II project would be the continuation of a planned commitment of the site to developed uses. The conversion of undeveloped land to urbanized uses is a permanent change. Once construction occurs, reversion of the land to its original condition is nearly impossible. Adoption of and approval of the SPA Plan would bring construction closer to realization.

Implementation of the proposed SPA Plan for EastLake Trails and SPA Plan Amendment for EastLake Greens would bring with it other permanent changes that have been recognized in other sections of this EIR. There would be more traffic, and hence noise, associated with the site; the landform would be permanently altered in noticeable ways; and there would be an increased human presence in the area, with a change from an abandoned rural atmosphere to that of residential.

Besides the commitment of land to urban use, implementation of the SPA plans and subsequent tentative maps would involve the consumption of natural resources, as well as energy derived from non-renewable sources, such as fossil and nuclear fuels. Building materials could for practical purposes be considered permanently consumed, though perhaps recyclable in part at some long-term future date.

6.0 PROJECT ALTERNATIVES

The California Environmental Quality Act requires that an SEIR include a discussion of reasonable alternatives to the project "which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project" (Section 12126 (d) of the CEQA Guidelines). The SEIR must also include a discussion of the No Project alternative. No Project considers the implications of not going forward with the proposed project.

Given the previous environmental review associated with the EastLake Trails project site (Final EIRs 81-3 and 86-4) and "Land Swap" parcels (Otay Ranch Final EIR) and the measures which have incorporated into the proposed project to substantially lessen each of the project's direct impacts, this SEIR includes a discussion of the No Project alternative and Development Consistent with the Adopted EastLake II GDP alternative.

6.1 No Project Alternative

Under the No Project alternative, the EastLake Trails project site and the "Land Swap" parcels would remain essentially in its existing undeveloped condition. The impacts associated with project implementation and the potentially significant cumulative impacts of proposed and approved developments in the area would not occur under this scenario. These impacts include impacts to wetland habitats in Salt Creek, landform alteration and aesthetic character, runoff and erosion patterns, noise, and traffic circulation.

However, EastLake Trails, as part of the City of Chula Vista General Plan and adopted EastLake II GDP, is an area planned for development in the city of Chula Vista, and it is likely that similar development would again be proposed for the site in the future. The No Project alternative would not accomplish the goals of the proposed project (i.e., a variety of housing types and accompanying planned community land uses).

6.2 Development Consistent with Adopted Plans

An alternative land use concept to the proposed project would be to implement the adopted GDP and not proceed with the proposed amendments and corresponding SPA Plan for the Trails and SPA Plan Amendment for the Greens (see Figures 3-1 and 3-3). Under this scenario, the "Land Swap" parcels would not be included in the Greens SPA, would not be annexed into the EastLake II GDP, and would remain as part of the Otay Ranch GDP as adopted in 1995. The land uses adopted for the Trails would remain as shown in the existing EastLake II GDP.

Implementation of this alternative would not substantially affect the significance of the impacts associated with the proposed EastLake Trails and "Land Swap" parcels project. However, this scenario would retain the commercial land use designation at the

intersection of Hunte Parkway and Otay Lakes Road and would increase the overall number of residential dwelling units within the EastLake Trails SPA by approximately 90 units. As such, there would be minor incremental increases in the impacts associated with the proposed EastLake Trails SPA Plan Amendment. The land uses shown for the "Land Swap" parcels are entirely consistent with those adopted under the Otay Ranch GDP and are also consistent with the Chula Vista General Plan. Retention of the "Land Swap" parcels as part of the Otay Ranch GDP would not affect the environmental impacts described in the SEIR.

A comparative discussion of the this alternative for the major environmental issues for the EastLake Trails project site is presented summarized below:

Land Use

Although significant land use impacts were not identified with the proposed project, implementation of the adopted EastLake II GDP land uses for the Trails site would eliminate the interface of single-family residential with the community park site in the northwest portion of the site. The adopted SPA plan, while different from the proposed project with respect to land use locations and residential densities, would not create other land use impacts.

Transportation/Traffic Circulation

Retention of the approximately 15-acre retail commercial land use designation in the northwestern corner of the site and the addition of approximately 90 residential units could substantially increase the traffic generation associated with the proposed SPA Amendment. Retention of the retail commercial center at the intersection of Hunte Parkway and Otay Lakes Road could require that additional improvements and mitigation measures be required beyond those shown for the proposed project.

Biological Resources

Because the area to be disturbed under the adopted GDP and the proposed SPA would be nearly identical, the impacts to sensitive biological resources (i.e., wetlands) within Salt Creek would not be substantially affected by this alternative.

Landform Alteration/Visual Quality

The community character and aesthetic components of the EastLake Trails project site under this alternative would be altered by the inclusion of a 15-acre retail commercial center at the intersection of Hunte Parkway and Otay Lakes Road, and the reconfiguration of the internal street layout and residential densities. However, the significance of both the grading and visual quality impacts would remain unchanged from that identified for

the proposed SPA and the adoption of design guidelines as mitigation for the impacts would continue to be required.

Noise

Although a grading plan has not been prepared for this alternative, it is likely that grading to accommodate this alternative would be similar to the proposed project. As such, most of the recommended noise mitigation measures (i.e., walls, berms, and setbacks) for the proposed project would also be required for this alternative. However, because the noise standard for commercial use is higher than residential, the noise walls recommended along Otay Lakes Road and Hunte Parkway for the proposed low-medium residential area would likely not be required.

Public Facilities

With the increase in residential units and addition of retail commercial use, the demand on public facilities and services would be incrementally increased under this alternative. The impacts regarding water consumption, sewage generation, police and fire demand, student generation, and park and recreation requirements would all be incrementally increased. However, the significance of these impacts and identified mitigation requirements would not be substantially affected if this alternative were implemented.

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